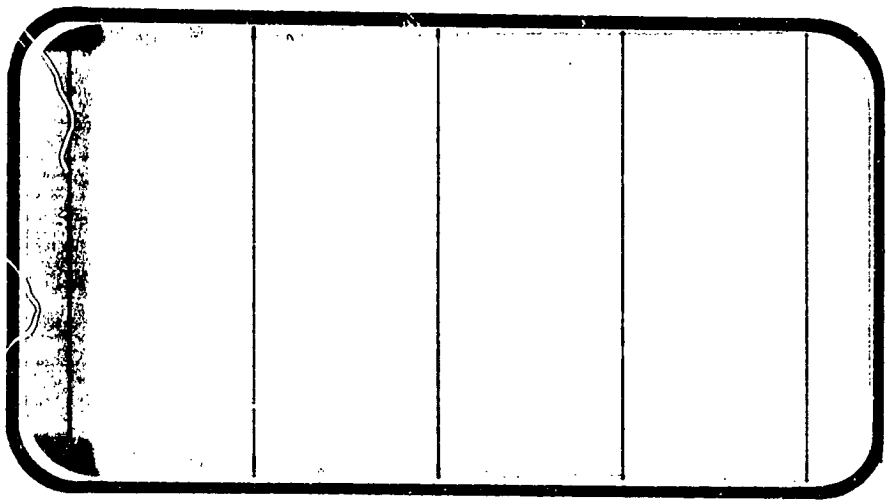
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

CR 134084



(NASA-CR-134084) RESULTS OF TESTS (OA64 AND IA35) OF AN 0.015-SCALE MODEL (36-OTS) OF THE SPACE SHUTTLE CONFIGURATION 140A/B IN THE (Chrysler Corp.) 598 P HC $33.00 CSCL 22B G3/31 Unclas 41585

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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services

SPACE DIVISION CHRYSLER CORPORATION

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RESULTS OF TESTS (0A64 AND IA35) OF AN 0.015-SCALE MODEL (36-OTS) OF THE SPACE SHUTTLE CONFIGURATION 140A/B IN THE NASA/LaRC UNITARY PLAN WIND TUNNEL

By

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Prepared under NASA Contract Number NAS9-13247

By

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New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

TEST SPECIFICS:

Test Number: LaRC UPWT 1063
NASA Series No: 0A64 and 1A35
Model No: 36-0TS
Test dates: 30 October through 2 November, 1973

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By D. E. Thornton and R. H. Spangler, Rockwell International

ABSTRACT

Supersonic aerodynamic tests were conducted in the NASA/LaRC Unitary Plan Wind Tunnel on a 0.015-scale model of the Space Shuttle Vehicle 4 configuration. Surface pressure data were obtained for both the launch (test IA35) and entry (test 0A64) configurations at Mach numbers from 2.5 to 4.5.

The surface pressure was measured in the vicinity of the cargo bay door hinge and parting lines and on the side of the fuselage at the crew compartment and below the OMS pods at the aft compartment. Data were obtained for angles of attack and sideslip consistent with the expected excursions about the nominal trajectory values at the test Mach numbers. These tests were a part of a test series supporting the orbiter venting analysis over a Mach number range from 0.6 to 10.4.

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TABLE OF CONTENTS

	PAGE
ABSTRACT	iii
INDEX OF MODEL FIGURES	2
INDEX OF DATA FIGURES	3
INTRODUCTION	4
NOMENCLATURE	5
CONFIGURATIONS INVESTIGATED	7
TEST FACILITY DESCRIPTION	9
TABLES	
I. TEST CONDITIONS	10
II. DATA SET/RUN NUMBER COLLATION SUMMARY	11
III. MODEL DIMENSIONAL DATA	13
IV. PRESSURE TAP LAYOUT	24
FIGURES	
MODEL	25
DATA	28
APPENDIX - TABULATED DATA	

INDEX OF MODEL FIGURES

Figure	Title	Page
1.	Axis systems.	25
2.	Model sketches.	
	a. Vehicle general arrangement.	26
	b. Pressure orifice locations.	27

INDEX OF DATA FIGURES

TITLE	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PAGES
Longitudinal Distribution of Local Pressure Field for Integrated Vehicles	A	MACH, α	1-28
Longitudinal Distribution of Local Pressure Field for Orbiter Alone	A	MACH, α	29-60
Radial Distribution of Local Pressure Field for Integrated Vehicle ($60° \leq \phi \leq 90°$)	B	MACH, α	61-88
Radial Distribution of Local Pressure Field for Integrated Vehicle ($90° \leq \phi \leq 180°$)	B	MACH, α	89-116
Radial Distribution of Local Pressure Field for Orbiter Alone ($60° \leq \phi \leq 90°$)	B	MACH, α	117-148
Radial Distribution of Local Pressure Field for Orbiter Alone ($90° \leq \phi \leq 180°$)	B	MACH, α	149-180

COEFFICIENT SCHEDULE:

A: CP vs. X/L

B: CP vs. PHI

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INTRODUCTION

The 0.015-scale Vent Pressure model (36-OTS) was tested in the high speed leg of the NASA Langley Research Center Unitary Plan Wind Tunnel at Mach numbers of 2.5, 2.95, 4.0, and 4.5. Pressure data were obtained to support the analysis of orbiter venting requirements during the ascent and entry modes. The effects of angle of attack and sideslip were investigated over a range consistent with trajectory requirements.

The tests were conducted during the period from October 30 through November 2, 1973. The shuttle program test identification numbers were OA64 and IA35. The facility test number was 1063.

NOMENCLATURE
General

SYMBOL	SADSAC SYMBOL	DEFINITION
a		speed of sound; m/sec, ft/sec
C_p	CP	pressure coefficient; $(p_l - p_\infty)/q$
M	MACH	Mach number; V/a
p		pressure; N/m^2, psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2\rho V^2$, N/m^2, psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
ϕ	PHI	angle of roll, degrees
ρ		mass density; kg/m^3, $slugs/ft^3$
		Reference & C.G. Definitions
A_b		base area; m^2, ft^2
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
ℓ_{REF} or $\bar{c}$	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m^2, ft^2
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

b	base
l	local
s	static conditions
t	total conditions
∞	free stream

NOMENCLATURE (Continued)
Additional Nomenclature

Symbol	SADSAC Symbol	Definition
x/ℓ	X/L	longitudinal location on orbiter fuselage, fraction of body length
δe_L	ELEVON	left elevon deflection angle, positive trailing edge down, degrees
ϕ	PHI	angular location on orbiter fuselage, degrees

CONFIGURATIONS INVESTIGATED

The 0.015-scale model was a replica of the Space Shuttle Configuration 140A/B Orbiter and Vehicle 4 external tank (ET) and solid rocket boosters (SRB). Though the attach points for the SRB and ET were in the proper location no attempt was made to simulate the actual attach configuration. Also, the external feed and vent lines on the ET were not simulated.

The orbiter was instrumented with 176 pressure taps on the left side of the fuselage. The orifices were located at the cargo bay door hinge and parting lines, on the side of the fuselage by the crew compartment and below the OMS pod at the aft compartment. The ET and SRB's were not instrumented.

The pressures were measured by four 10 psia Stathan PA 208 TC absolute pressure transducers housed in four type S Scanivalve pressure multiplexors driven by a single solenoid type stepper. Calibration pressures were measured by the facility micro-manometers.

Two configurations were tested. During launch vehicle testing the SRB's were attached to the tank and the ET to the orbiter. All control surfaces were set at 0° deflection. For entry configuration testing the SRB's and ET were replaced with appropriate off blocks. The left elevon was set at -15°. All other control surfaces remained at 0° deflection.

During the course of the test some pressure orifices or associated tubing developed leaks or became plugged. The following list presents these discrepancies and the affected runs:

Oh04

Runs 1 to 25

Leaks	206
Restricted	105
Plugged	429

Runs 26 to 35

Leaks	144, 243, 340
Plugged	242, 303

IA35

Runs 36 to 50

Leaks	144, 243, 340, 428, 445
Restricted	303
Plugged	246, 247

The following conditions were run:

OA64 - Orbiter alone

$\delta e_L = -15°$
Mach Nos. = 2.5, 2.95, 4.0, 4.5
Reynolds Nos. = 3.8, 3.35, 3.5, 3.5 x 10^6
α = 8, 10, 12, 14, 16, 18, 20, 22
β = 0, ±2, ±4, ±6

IA35 - Launch Vehicle

$\delta e_L = 0°$
Mach Nos. = 2.5, 2.95, 4.0, 4.5
Reynolds No. = 3.8, 3.35, 3.5, 3.5 x 10^6
α* = 0, ±2, ±4, +6
β = 0, ±4, ±6

* The data at $\beta = -6°$, α = 0, 2, 4, 6 at M = 4.5 were deleted due to equipment problems, November 1. Time did not allow returning to these conditions to pick up these points after correction of the problems.

TEST FACILITY DESCRIPTION

The NASA LaRC 4-Foot Unitary Plan Wind Tunnel (UPWT) is a closed-circuit, continuous flow, variable density facility. The test section is 4 feet by 4 feet by 7 feet long.

Two tunnel legs are available for supersonic testing in the Mach number ranges 1.47 to 2.86 (Leg No. 1) and 2.29 to 4.63 (Leg No. 2). An asymmetric, sliding block nozzle position and total pressure setting provide the test Mach numbers at a specified Reynolds number. Reynolds number can be varied from 0.76 to 7.78 million per foot. Available stagnation pressure variation is 4.0 to 142. psia. Dynamic pressure variation is 95. to 1260. psf with normal operating stagnation temperature about 150°F in Mach modes 2 or 3 and about 175°F in Mach mode 4. The tunnel is equipped with a dry air supply, an evacuating system, and a cooling system. The facility power is approximately 83,000 horsepower.

Model mounting provisions consist of various sting arrangements, including axial (longitudinal), lateral (independent pitch and yaw), and roll movement with side wall support. A Schlieren system and oil flow visualization equipment are available. Data are recorded at the tunnel and reduced off-line at the Langley Computer Center. The tunnel is used for force and moment, pressure, and dynamic stability tests. Hot and cold jet effects and heat transfer have been studied in the UPWT.

TABLE I.

TEST : IA35/0A64 DATE : Oct-Nov '73

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
2.5	2.5×10^6/ft.	3.82	150
3.0	2.5×10^6/ft.	3.34	150
4.0	2.5×10^6/ft.	2.50	175
4.5	2.5×10^6/ft.	2.08	175

BALANCE UTILIZED: None

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF			
SF			
AF			
PM			
RM			
YM			

COMMENTS: Model instrumented with 176 static pressure orifices.

TABLE II.

TEST: OA 64 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: OCT. 30 - NOV. 2, 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION δ_{EL}	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.5	2.95	4.0	4.5	TEST RUN NUMBERS
RQ4001	$B_{26}C_9E_{26}F_8M_7N_{25}R_5W_{12}$	B	6	-15		1	8	15	22	
RQ4002	↓	B	4	-15		2	9	16	23	
RQ4003		B	2	-15		3	10	17	24	
RQ4004		B	0	-15		4	11	18	25	
RQ4005		B	-2	-15		5	12	19	26	
RQ4006		B	-4	-15		6	13	20	27	
RQ4007		B	-6	-15		7	14	21	28	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

CA ... MACH ALPHA 1

COEFFICENTS — IDVAR (1) — IDVAR (2) — NDV

α OR β SCHEDULES

A = 0, ±2, ±4, ±6

B = 8, 10, 12, 14, 16, 18, 20, 31

TABLE II. - Concluded.

TEST: EA35 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: OCT. 30 - NOV. 2, 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION δ_{EL}	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.5	2.95	4.0	4.5	TEST RUN NUMBERS
RQS001	$B_{2,6}C_9E_{2,6}F_{8,7}M_7N_{2,5}R_5W_{4,5}S_{1,7}T$	A	6	0		41	36	46	29	
RQS002	→	A	4	0		42	37	50	30	
RQS003		A	2	0		—	—	—	31	
RQS004		A	0	0		43	38	47	32	
RQS005		A	-2	0		—	—	—	33	
RQS006		A	-4	0		44	39	48	34	
RQS007		A	-6	0		45	40	49	35	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

CP MACH ALPHA 1

α OR β SCHEDULES: A = 0, ±2, ±4, ±6 — COEFFICENTS — IDVAR (1) — IDVAR (2) — NDV

TABLE III. - MODEL DIMENSIONAL DATA

MODEL COMPONENT: BODY - B_{26}

GENERAL DESCRIPTION: Orbiter Fuselage Configuration 140 A/B

NOTE: B_{26} identical to B_{24} except underside of fuselage refaired to accept W_{116}.

Model Scale = 0.015

DRAWING NUMBER: VL70-000193
VL70-000140A

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length (Body Fwd Sta X_o = 235) - in.	1293.3	19.35450
Max. Width (at X_o = 1520) - in.	262.0	3.93000
Max. Depth (at X_o = 1464) - in.	250.0	3.75000
Fineness Ratio	0.26357	0.26357
Area - ft^2		
Max. Cross-Sectional	340.88462	0.07670
Planform		
Wetted		
Base		

TABLE III. - Continued.

MODEL COMPONENT: CANOPY - C_9

GENERAL DESCRIPTION: Configuration 3A

Model Scale = 0.015

DRAWING NUMBER VL70-000140A
VL70-000143A

DIMENSION:	FULL SCALE	MODEL SCALE
Length (X_o=434.643 to 670)	235.357	3.53036
Max Width (@ X_o=513.127)	152.412	2.28618
Max Depth (@ X_o=485.0)	25.000	0.37500
Fineness Ratio		
Area		
Max Cross-Sectional		
Planform		
Wetted		
Base		

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TABLE III. - Continued.

MODEL COMPONENT: ELEVON - E_{26}

GENERAL DESCRIPTION: Configuration 4

NOTE: VL70-000400 data for (1) of (2) sides. Identical to E_{25} except airfoil thickness

Model Scale = 0.015

DRAWING NUMBER: VL70-000200
VL70-000140 B

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area	223.5814	0.05031
Span (equivalent)	368.34	5.52510
Inb'd equivalent chord	119.623	1.79434
Outb'd equivalent chord	55.1922	0.82788
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.2096	0.2096
At Outb'd equiv. chord	0.4004	0.4004
Sweep Back Angles, degrees		
Leading Edge	0.00	0.00
Tailing Edge	-10.056	-10.056
Hingeline	0.00	0.00
Area Moment (Normal to hinge line)	851.1502	0.00287

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

TABLE III. - Continued.

MODEL COMPONENT: Body Flap - F_8

GENERAL DESCRIPTION: Configuration 4

Model Scale - 0.015

DRAWING NUMBER VL70-000140B, VL70-000200

DIMENSION:	FULL SCALE	MODEL SCALE
Length in.	94.856	1.42284
Max Width in.	262.308	3.943462
Max Depth in.	23.000	0.34500
Fineness Ratio		
Area - ft^2		
Max Cross-Sectional		
Planform	158.85350	0.03574
Wetted		
Base	41.89642	0.00943

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR.

TABLE III. - Continued.

MODEL COMPONENT: OMS POD - M7

GENERAL DESCRIPTION: Configuration 3A

MODEL SCALE: 0.015

DRAWING NUMBER: VL70-000140A
VL70-000145

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length (OMS Fwd Sta X_o = 1233.0) - IN.	327.000	4.9050
Max Width (@ X_o = 1450.0) - IN.	94.5	1.4175
Max. Depth (@ X_o = 1493.0) - IN.	109.000	1.6350
Area		
Max Max Cross-Sectional		
Planform		
Wetted		
Base		

TABLE III. - Continued

MODEL COMPONENT: BSRM NOZZLES - N25

GENERAL DESCRIPTION: Configuration 3A BSRM Nozzles

Model Scale = 0.015

DRAWING NO. VL72-000088A
VL77-000036A

DIMENSIONS	FULL-SCALE	MODEL SCALE
MACH NO.		
DIAMETER DEX ~ IN (One Nozzle)	141.3	2.11950
DIAMETER DT ~ IN		
DIAMETER DIN ~ IN		
ON ~ DEGREES		
AREA - FT^2 (One Nozzle)		
MAX CROSS-SECTIONAL	108.89595	0.02450

GIMBAL ORIGIN	X_o	Y_o	Z_o
LEFT NOZZLE ~ IN. F.S.	1825.3	-243	400
RIGHT NOZZLE ~ IN. FS	1825.3	+243	400

NULL POSITION - DEG.	PITCH	YAW
LEFT NOZZLE	±8	±8
RIGHT NOZZLE	±8	±8

TABLE III. - Continued.

MODEL COMPONENT: RUDDER - R5

GENERAL DESCRIPTION: 2A, 3 and 3A Configuration per Rockwell Lines VL70-000095

Model Scale = 0.015

DRAWING NUMBER: VL70-000095

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area - FT^2	106.38	0.02394
Span (equivalent) - IN.	201.0	3.01500
Inb'd equivalent chord	91.585	1.37378
Outb'd equivalent chord	50.833	0.76249
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.400	0.400
At Outb'd equiv. chord	0.400	0.400
Sweep Back Angles, degrees		
Leading Edge	34.83	34.83
Tailing Edge	26.25	26.25
Hingeline	34.83	34.83
Area Moment (Normal to hinge line) - FT^3 Product of Area and Mean Chord	526.13	0.00178

TABLE III. - Continued.

MODEL COMPONENT: BOOSTER SOLID ROCKET MOTOR - S12

GENERAL DESCRIPTION: Configuration 3A, Data for (1) of (2) sides, per Rockwell Lines VL77-000036A

Model Scale = 0.015

DRAWING NUMBER VL72-000088A VL77-000036A

DIMENSION:	FULL SCALE	MODEL SCALE
Length (Includes Nozzle) - IN.	1741.0	26.1150
Max Width (Tank Dia) - IN.	142.3	2.1345
Max Depth (Aft Shroud) - IN.	192.0	2.8800
Fineness Ratio	9.06771	9.06771
Area - FT^2		
Max Cross-Sectional	201.06193	0.04524
Planform		
Wetted		
Base		
WP of BSRM Centerline (Z_T) - IN.	400	6.0000
FS of BSRM Nose (X_T) - IN.	200	3.0000

TABLE III. - Continued.

MODEL COMPONENT: EXTERNAL TANK - T12

GENERAL DESCRIPTION: External Oxygen Hydrogen Tank

NOTE: Identical to T11 with external fuel lines added

Model Scale = 0.015

DRAWING NUMBER VL78-000031A
VL78-000041A

DIMENSION:	FULL SCALE	MODEL SCALE
Length - IN. (Nose @ X_T = 309)	1865	27.9750
Max Width (Dia) - IN.	324	4.860
Max Depth		
Fineness Ratio	5.75617	5.75617
Area - FT^2		
Max Cross-Sectional	572.555	0.12882
Planform		
Wetted		
Base		
WP of Tank Centerline (X_T) - IN.	400.0	6.0000

TYPE III. - Continued.

MODEL COMPONENT: VERTICAL - V e

GENERAL DESCRIPTION: Configuration 3A

NOTE: Similar to V5 with radius on TW upper corner and IE lower corner where vertical meets fuselage.

Model Scale = 0.015

DRAWING NUMBER: VL70-000146A
VL70-000146A

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) Ft^2	413.253	0.09298
Planform		
Span (Theo) In	315.720	4.73580
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	0.40399	0.40399
Sweep Back Angles, degrees		
Leading Edge	45.00	45.00
Trailing Edge	25.947	25.947
0.25 Element Line	41.130	41.130
Chords:		
Root (Theo) WP	268.500	4.02750
Tip (Theo) WP	108.420	1.62705
MAC	199.80756	2.99711
Fus. Sta. of .25 MAC	1463.50	21.95250
W. P. of .25 MAC	635.522	9.53283
B. L. of .25 MAC	0.00	0.00
Airfoil Section		
Leading Wedge Angle Deg	10.00	10.00
Trailing Wedge Angle Deg	14.930	14.930
Leading Edge Radius (Min) - IN.	2.00	0.0300
Void Area	13.17	0.00296
Blanketed Area	0.00	0.00

TABLE III. - Concluded.

MODEL COMPONENT: $WING\text{-}W_{116}$

GENERAL DESCRIPTION: Configuration 4

NOTE: Identical to W_{114} except airfoil thickness. Dihedral angle is along trailing edge of wing.

MODEL SCALE: 0.015

TEST NO.

DWG. NO. VL70-000140B VL70-000200

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) Ft^2	2690.00	0.60525
Planform		
Span (Theo In.	936.6816	14.05022
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees	3.500	-3.500
Incidence Angle, degrees	0.500	0.500
Aerodynamic Twist, degrees	± 3.000	± 3.000
Sweep Back Angles, degrees		
Leading Edge	45.00	45.00
Trailing Edge	-10.056	-10.056
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.0.0.	689.2429	10.33864
Tip, (Theo) B.P.	137.8486	2.06773
MAC	474.8117	7.12218
Fus. Sta. of .25 MAC	1126.721	17.05082
W.P. of .25 MAC	291.00	4.36500
B.L. of .25 MAC	187.33491	2.81002
EXPOSED DATA		
Area (Theo) Ft^2	1812.2205	0.40775
Span, (Theo) In. BP108	736.6816	14.05022
Aspect Ratio	2.058	2.058
Taper Ratio	0.2451	0.2451
Chords		
Root BP108	570.6230	8.55934
Tip 1.00 $\frac{b}{2}$	137.8512	2.06777
MAC	354.2376	5.31356
Fus. Sta. of .25 MAC	1164.237	17.46356
W.P. of .25 MAC	292.00	4.38000
B.L. of .25 MAC	239.67786	3.59517
Airfoil Section (Rockwell Mod NASA) XXXX-64		
Root $\frac{b}{2}$ =	0.113	0.113
Tip $\frac{b}{2}$ =	0.12	0.12
Data for (1) of (2) Sides		
Leading Edge Cuff Planform Area Ft^2	118.333	0.0266
Leading Edge Intersects Fus M. L. @ Sta	505.0	7.57500
Leading Edge Intersects Wing @ Sta	1003.5	15.05250

Table IV. Pressure Tap Layout

X_o	X/L	ϕ = 60	ϕ = 70	ϕ = 80	ϕ = 90	ϕ = 100	ϕ = 110	ϕ = 120	ϕ = 130	ϕ = 140	ϕ = 150	ϕ = 160	ϕ = 170	ϕ = 180
350	.087	102	103	104										
400	.126	105	106	107										
450	.164	108	109	110	111									
500	.203				112									
550	.242				113									
578	.264				114	115	116	117	118	119	120	121	122	123
602	.282				126	127	128							129
626	.301				130	131	132							133
650	.319				134	135	136							137
674	.338				138	139	140							141
698	.357				142	143	144							145
722	.375				146	147	202							203
746	.394				204	205	206							207
760	.405				208	209	210	211	212	213	214	215	216	217
794	.431				218	219	220							221
818	.450				222	223	226							227
842	.468				228	229	230							231
866	.486				232	233	234							235
890	.505				236	237	238							239
914	.524				240	241	242							243
942	.546				244	245	246	247	302	303	304	305	306	307
962	.561				308	309	310							311
986	.580				312	313	314							315
1010	.598				316	317	318							319
1034	.617				320	321	322							323
1058	.636				326	327	328							329
1082	.654				330	331	332							333
1106	.673				334	335	336							337
1125	.668				338	339	340	341	342	343	344	345	346	347
1154	.710				402	403	404							405
1178	.729				406	407	408							409
1202	.747				410	411	412							413
1226	.767				414	415	416							417
1250	.785				418	419	420							421
1274	.803				422	423	426							427
1307	.829				428	429	430	431	432	433	434	435	436	437
1350	.862	438	439	440	441									
1400	.900		442	443	444									
1450	.940		445	446	447									

ϕ in degrees, measured clockwise from bottom centerline (looking forward) about FRL at Z_o = 400, Y_o = 0 0.

Notes:

1. Positive directions of force cofficients, moment coefficients, and angles are indicated by arrow
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

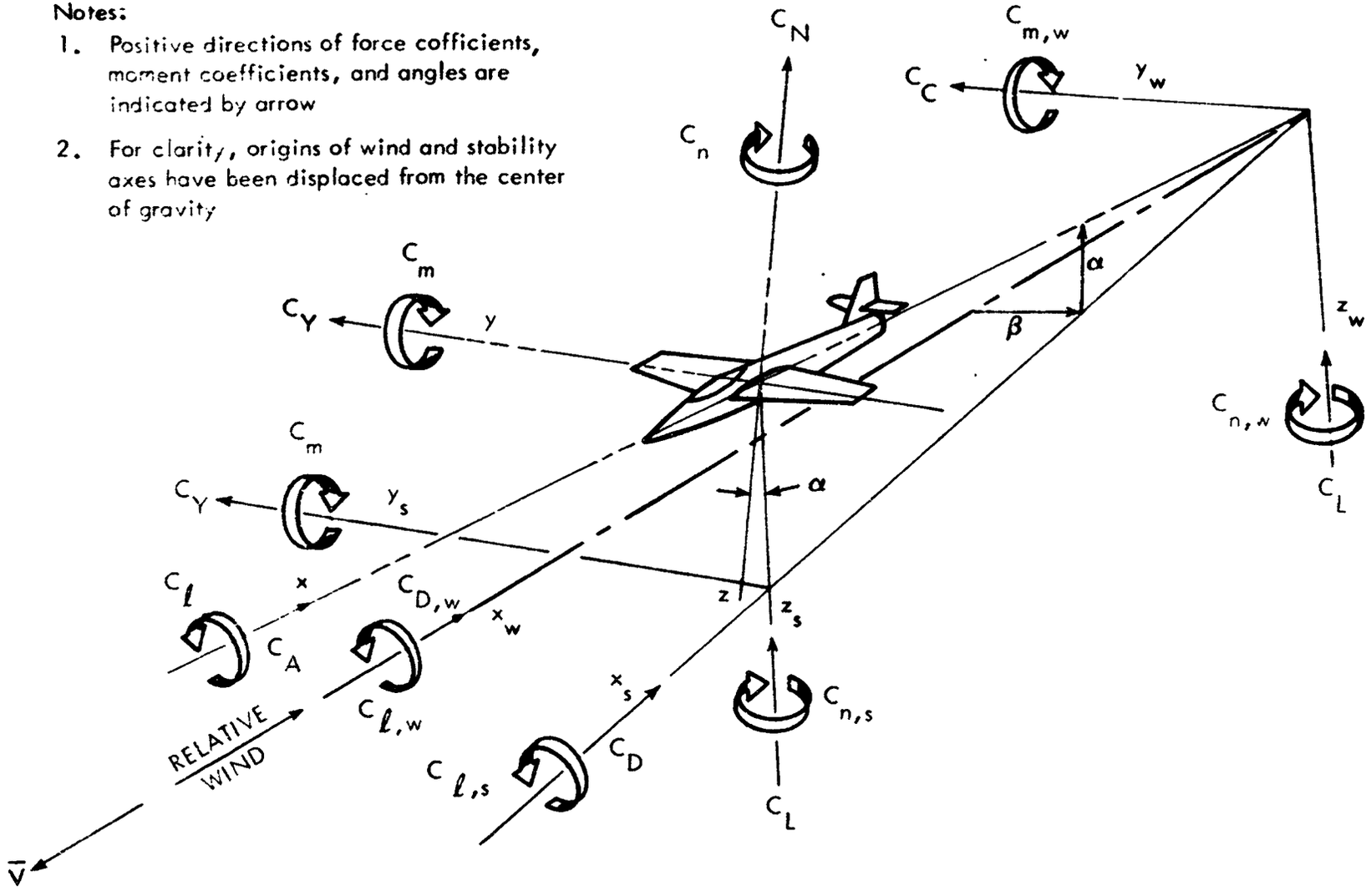
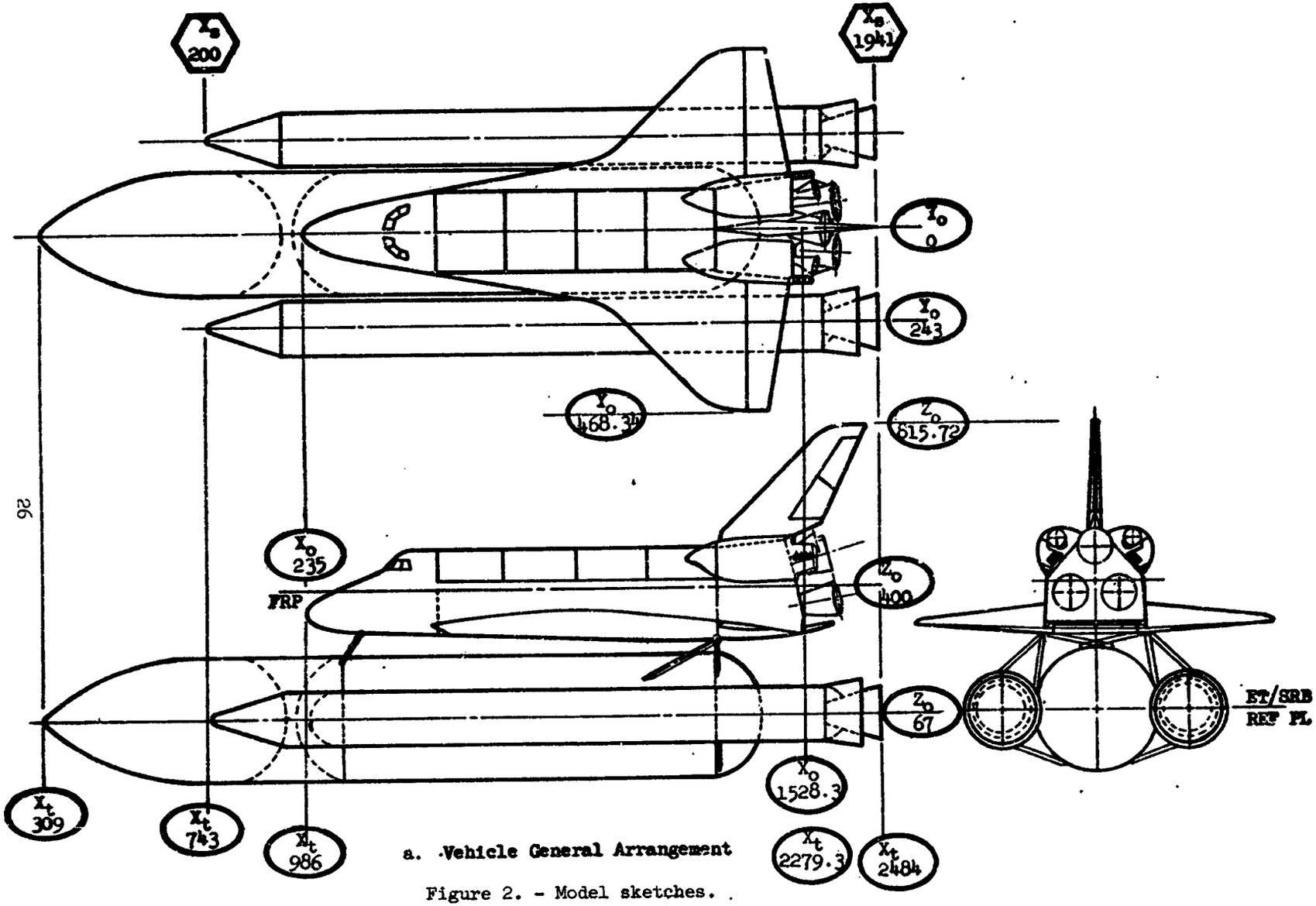
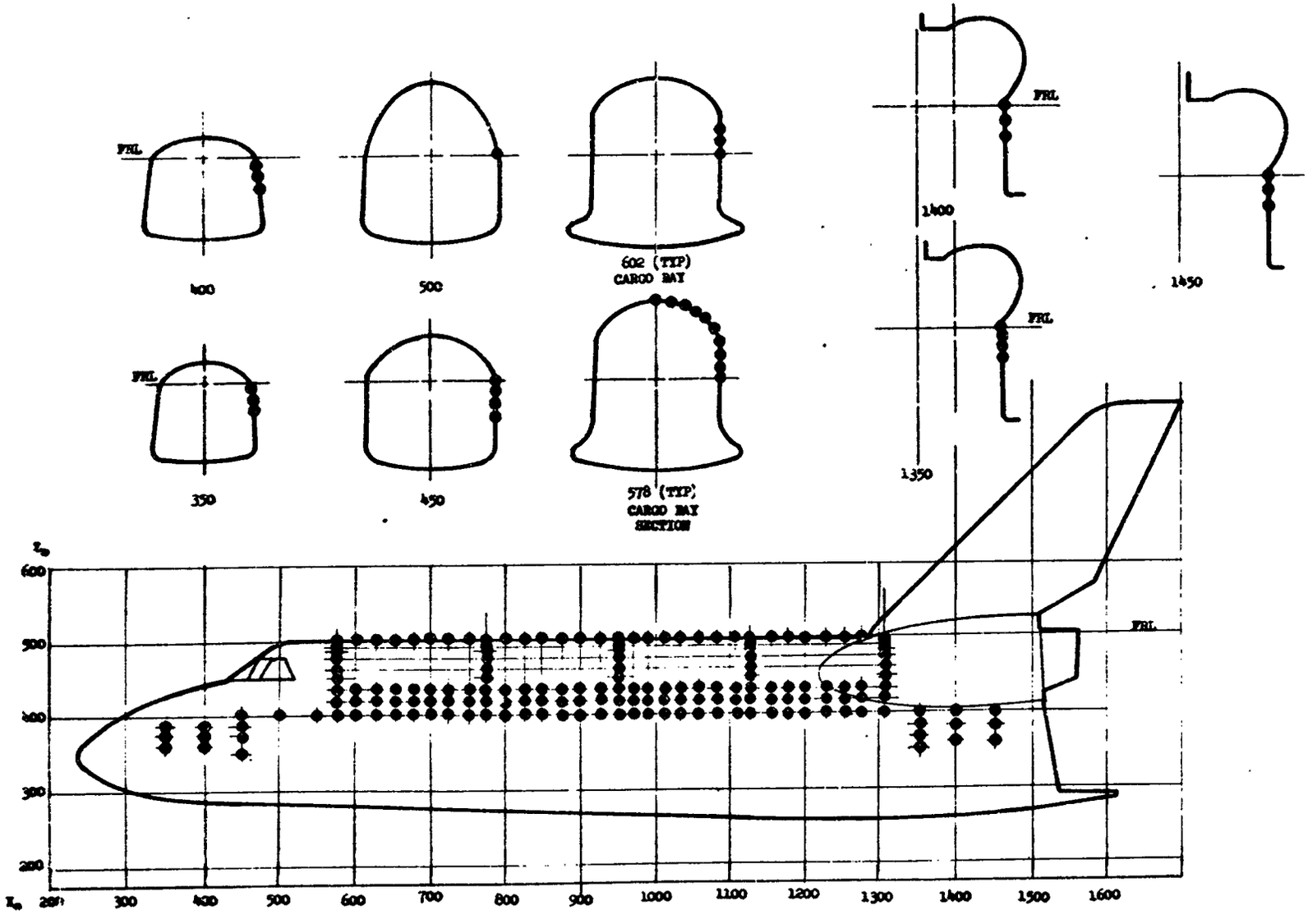


Figure 1. - Axis systems.



a. Vehicle General Arrangement

Figure 2. - Model sketches.



b. Pressure orifice locations

Figure 2. - Concluded.

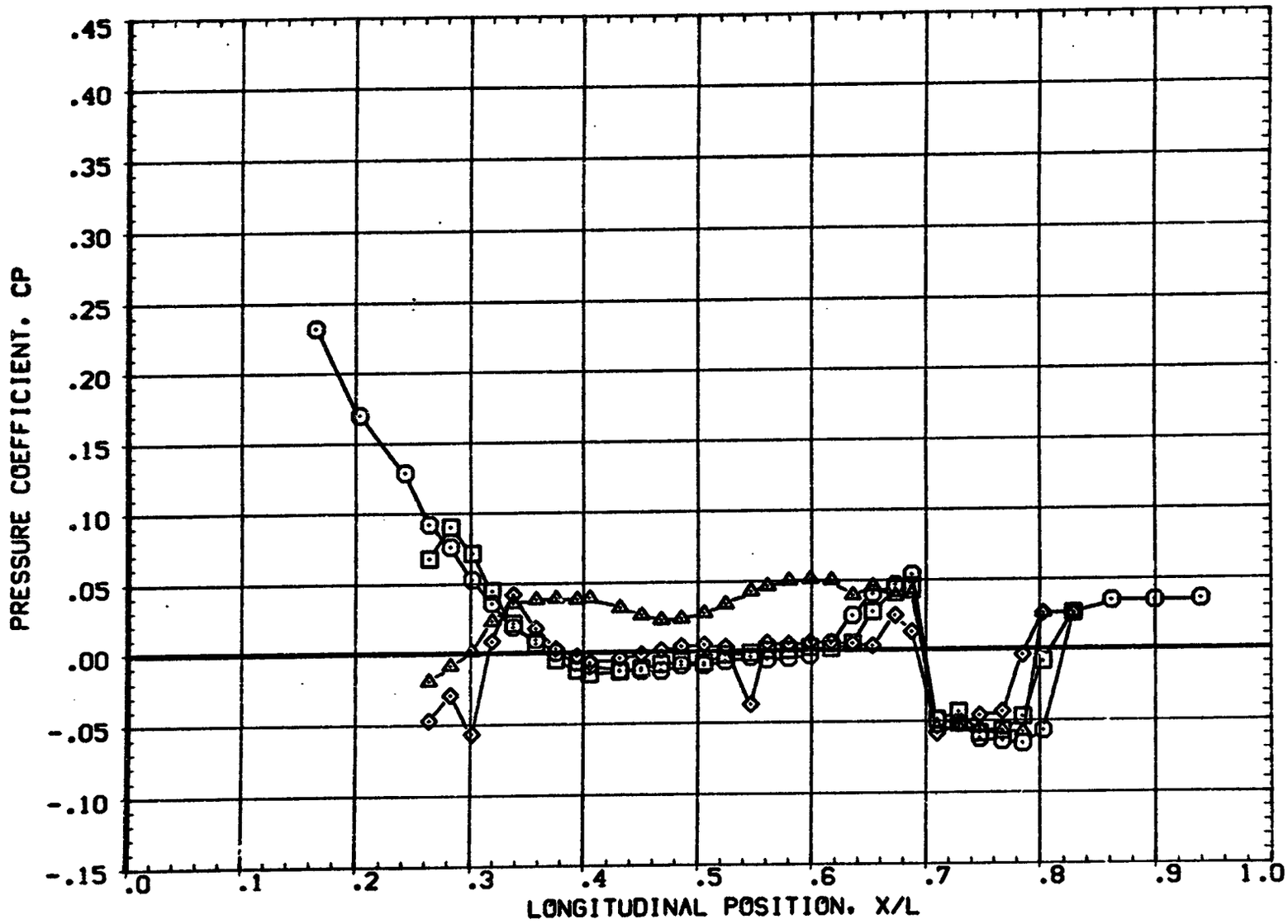
DATA FIGURES

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	PHI	ALPHA	MACH
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□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON .000



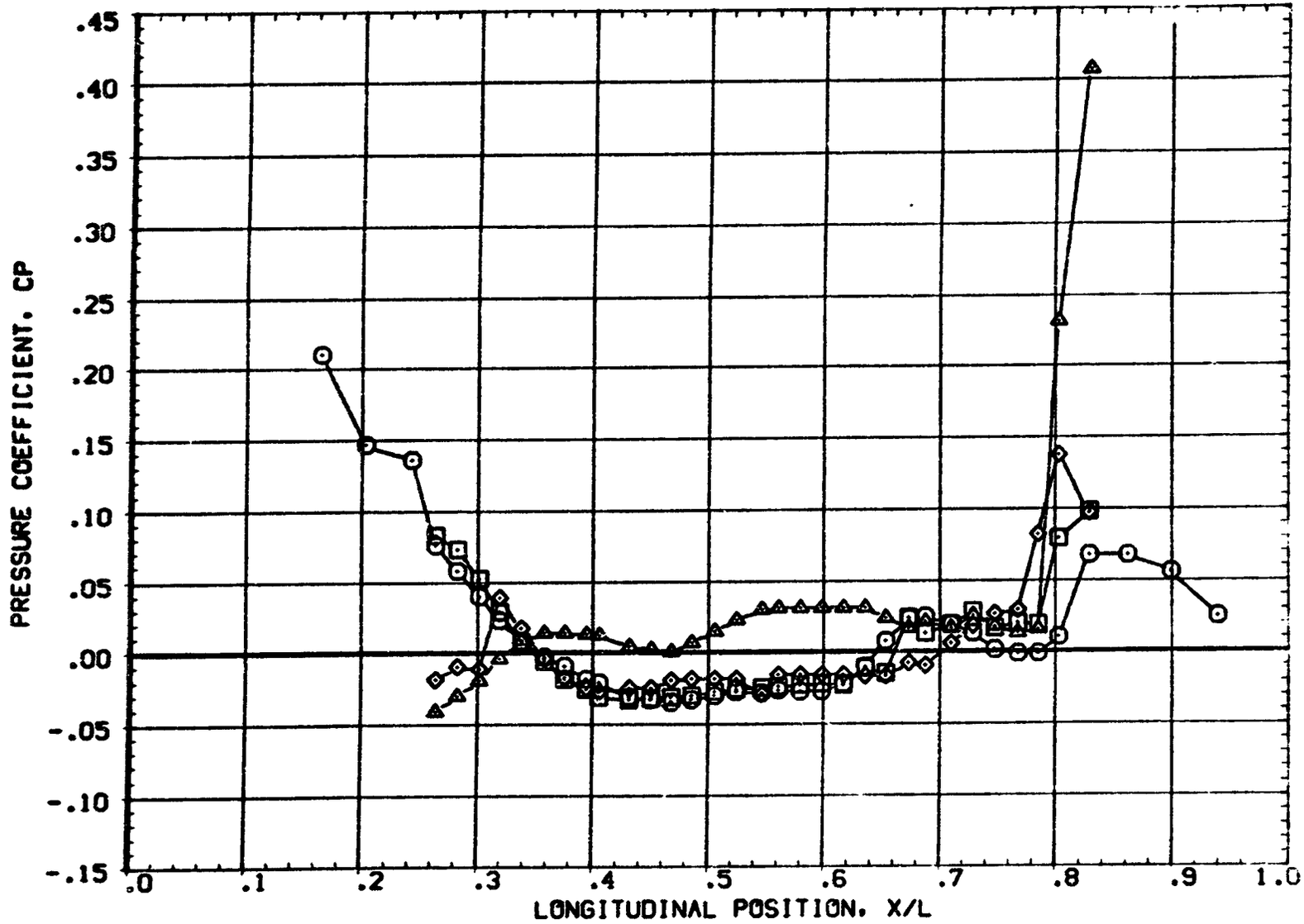
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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◇	110.000		
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PARAMETRIC VALUES

BETA .000 ELEVON .000



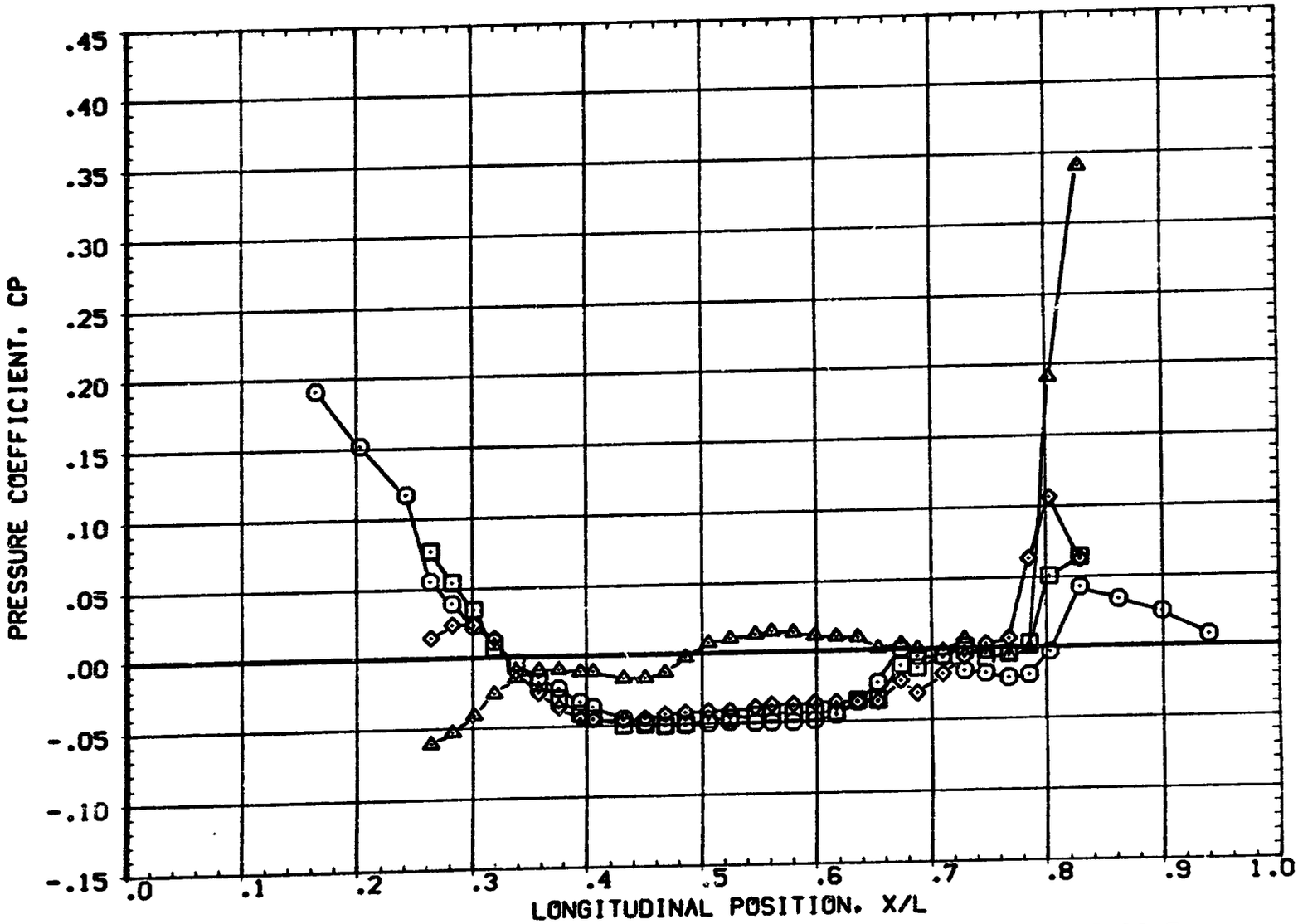
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IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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◇	110.000		
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PARAMETRIC VALUES

BETA .000 ELEVON .000



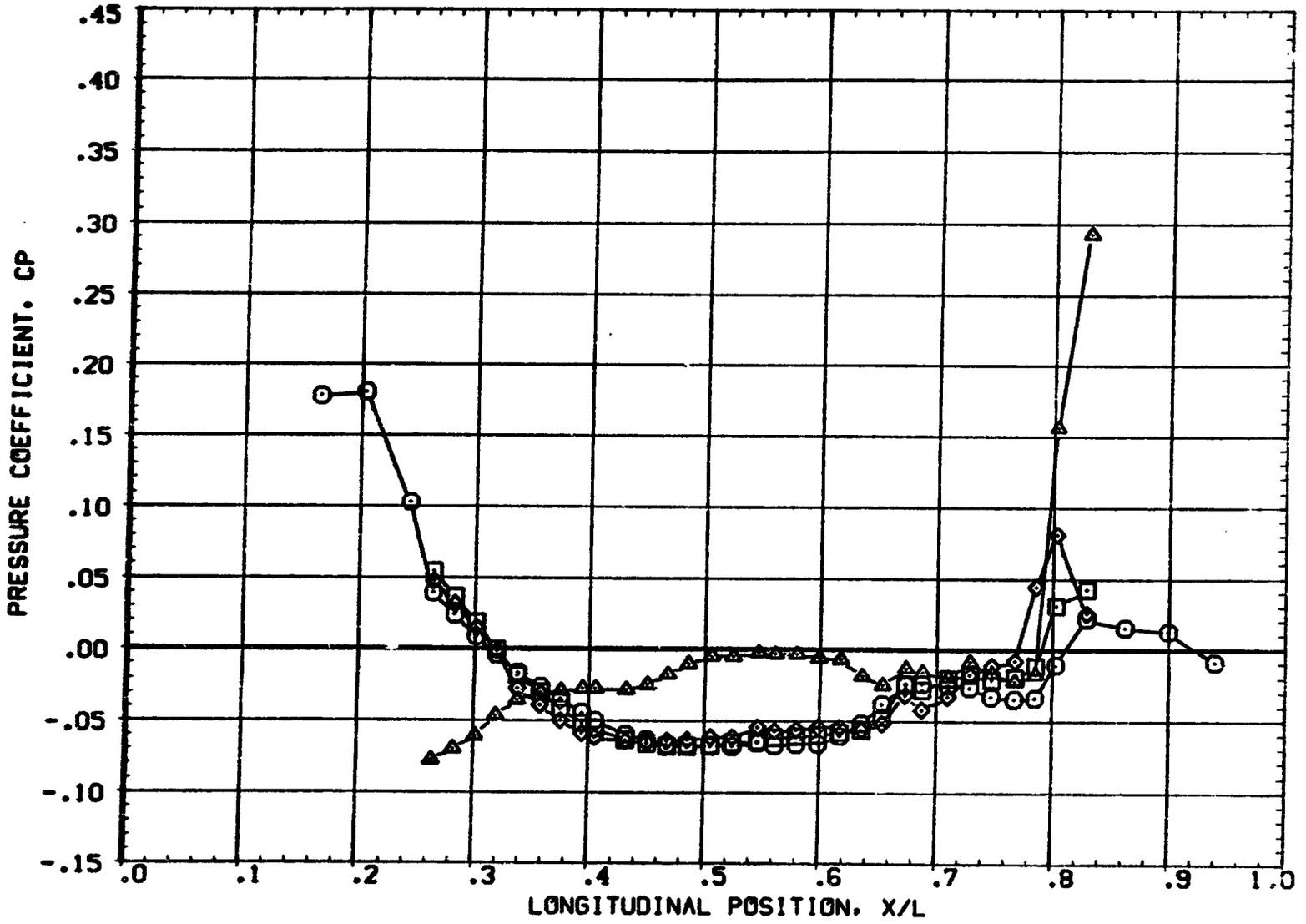
.. LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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□	100.000		
◇	110.000		
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PARAMETRIC VALUES

BETA .000 ELEVON .000



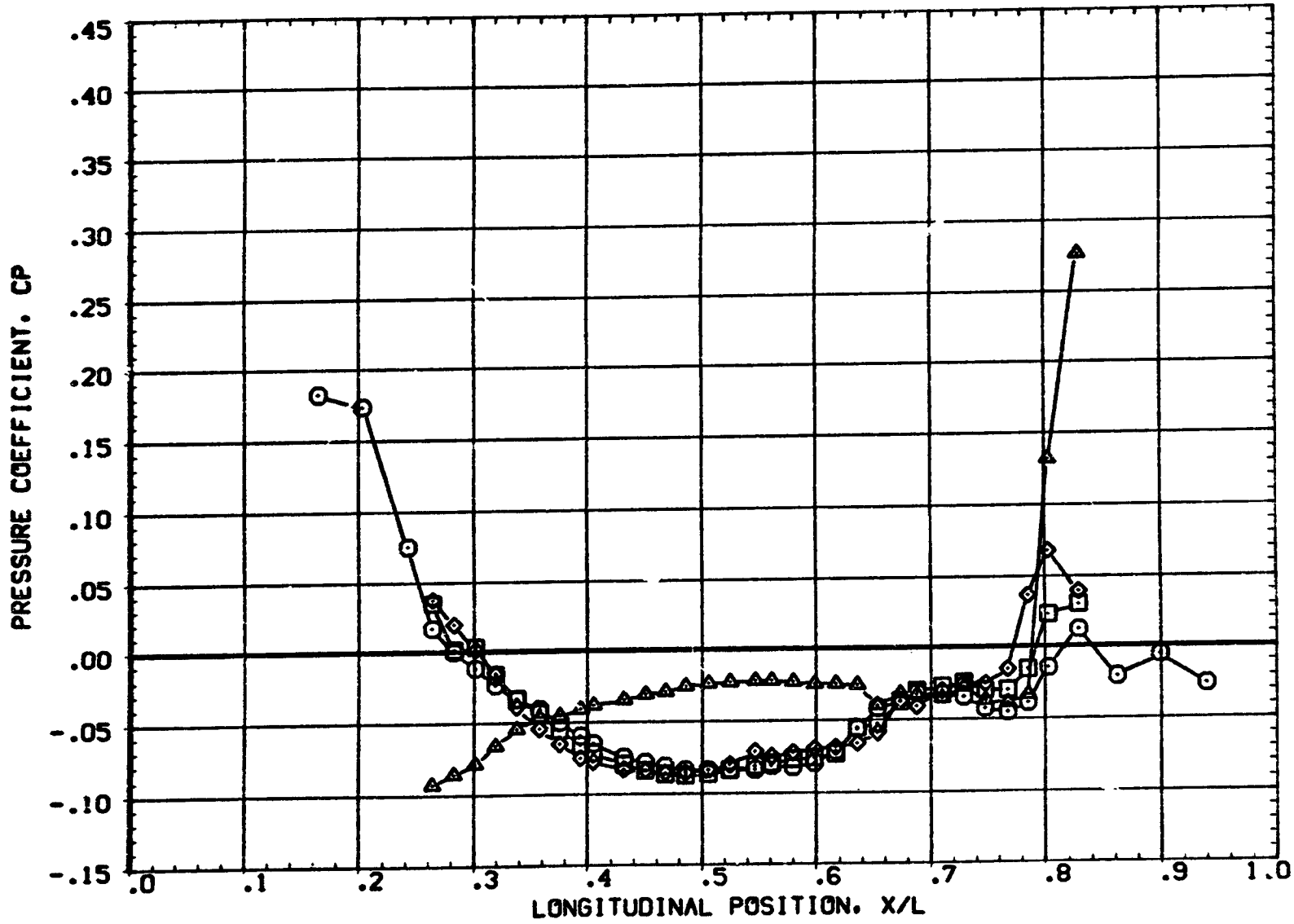
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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◇	110.000		
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PARAMETRIC VALUES

BETA .000 ELEVON .000



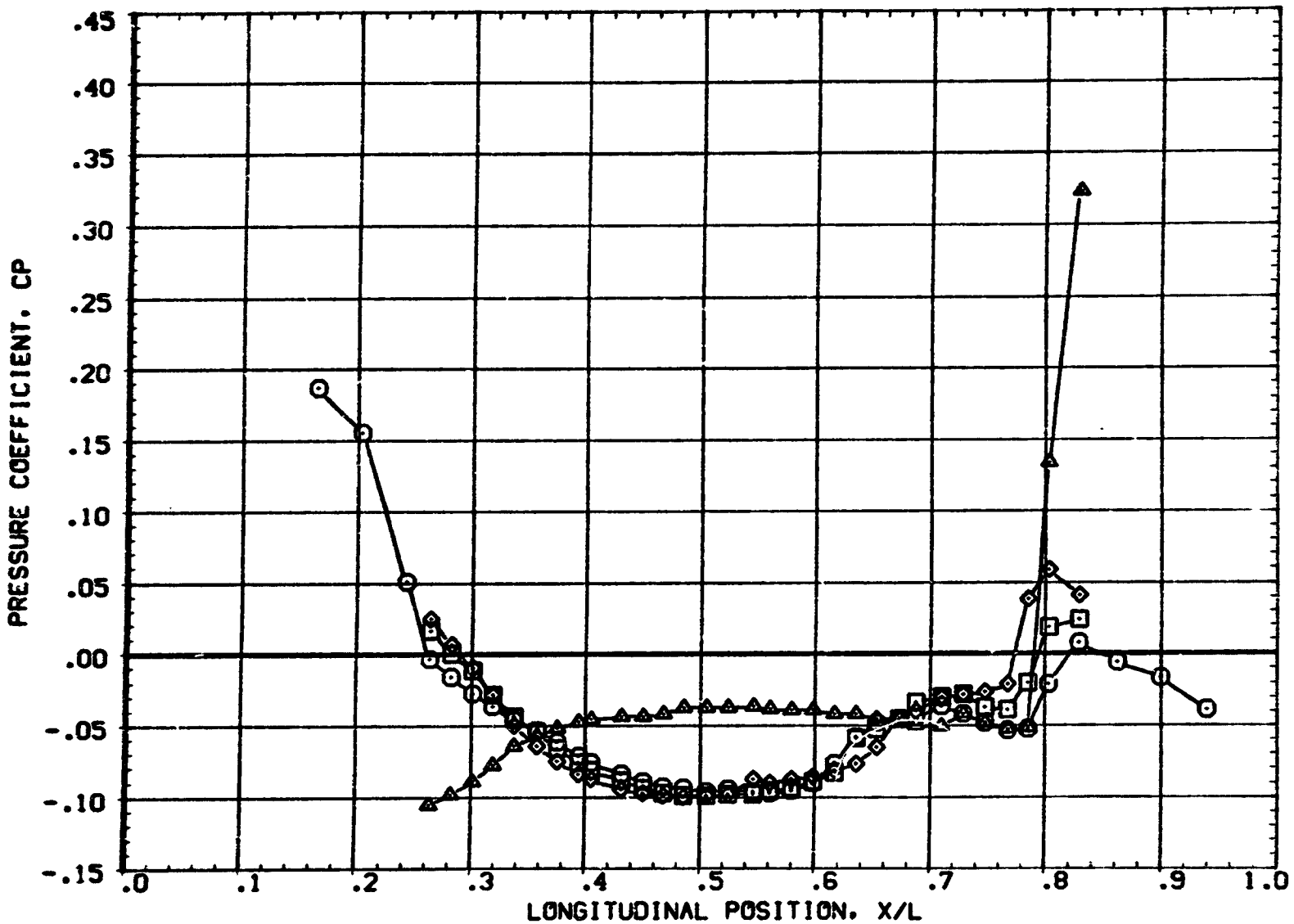
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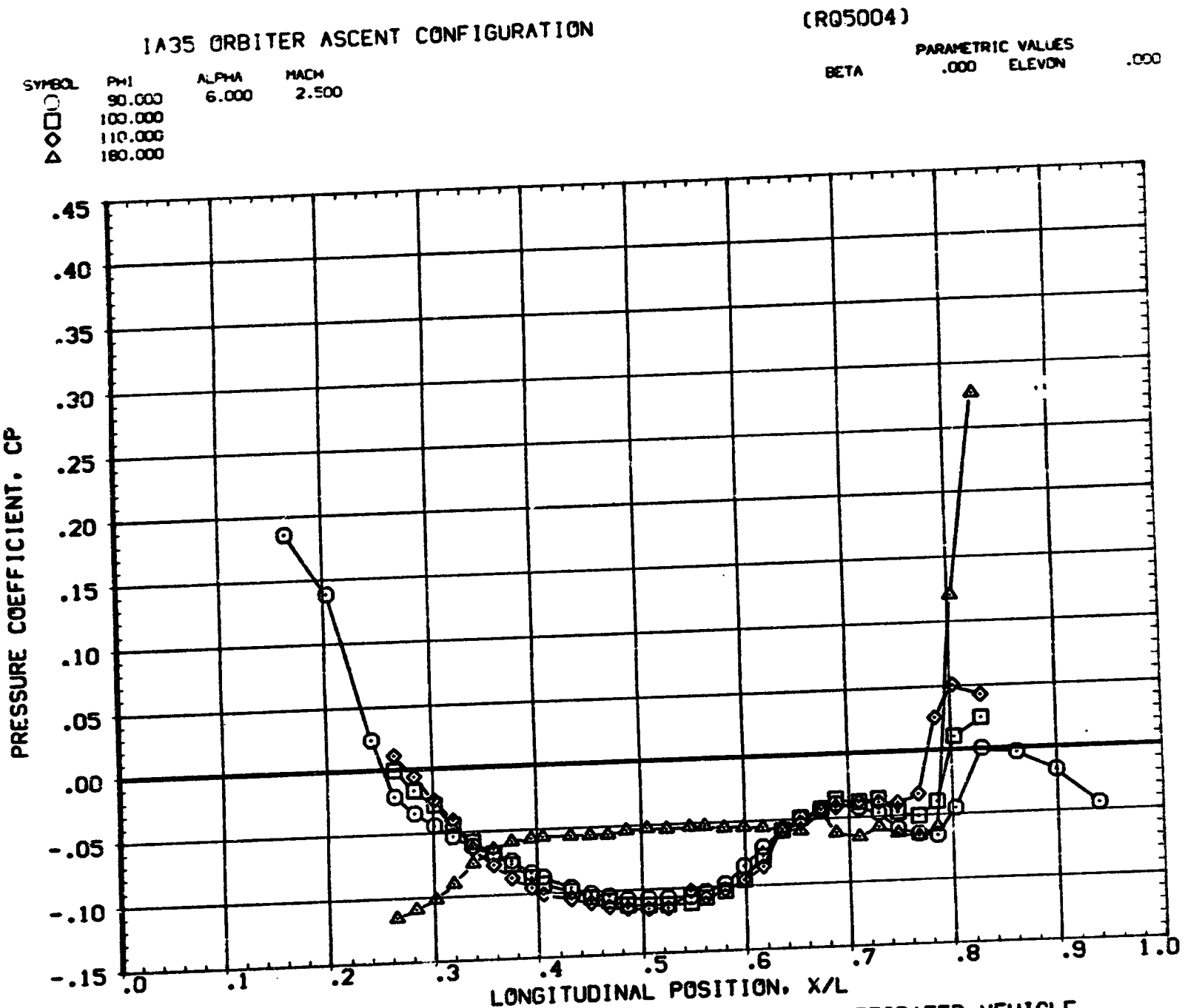
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◇	110.000		
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PARAMETRIC VALUES

BETA .000 ELEVON .000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



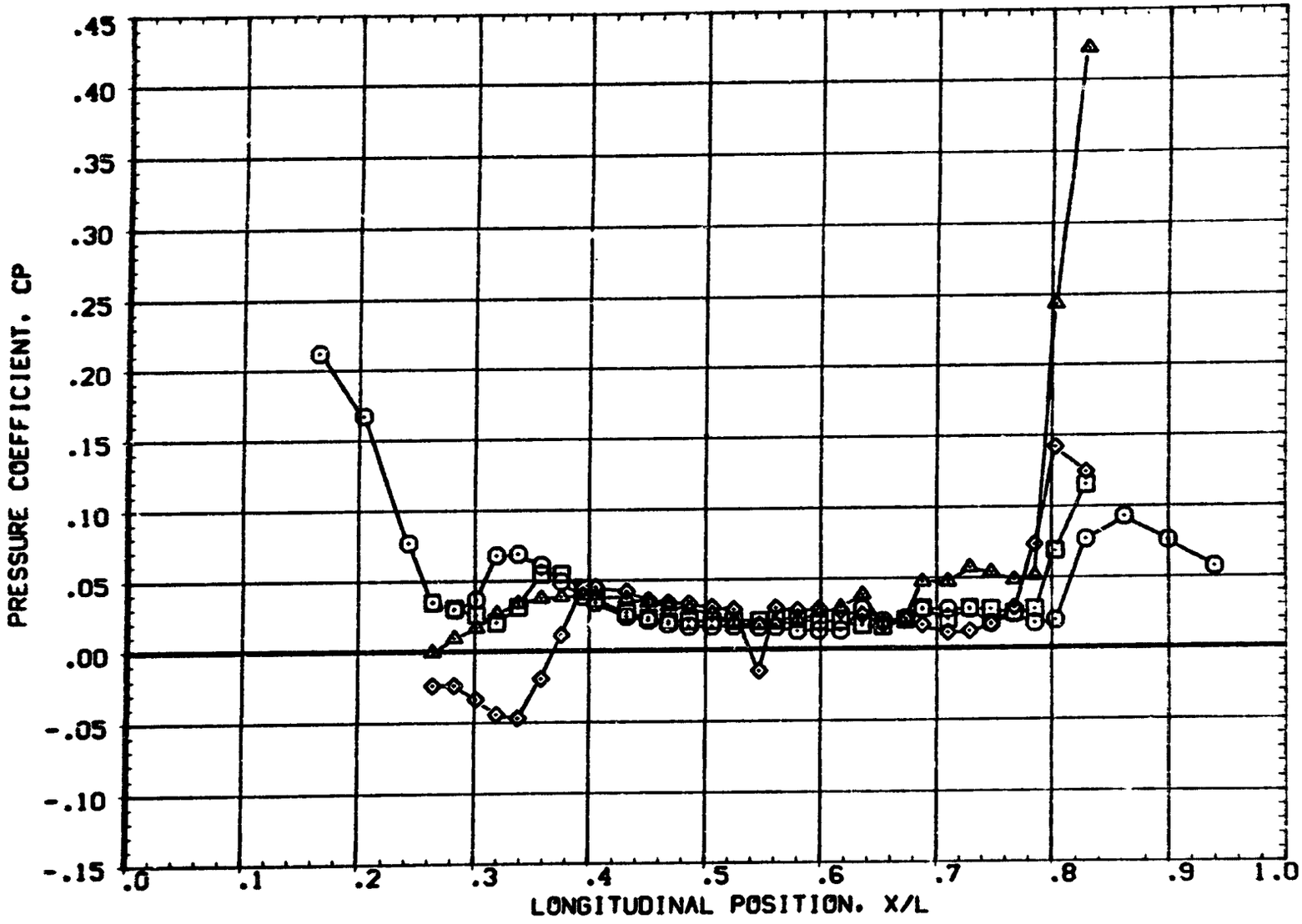
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IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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PARAMETRIC VALUES

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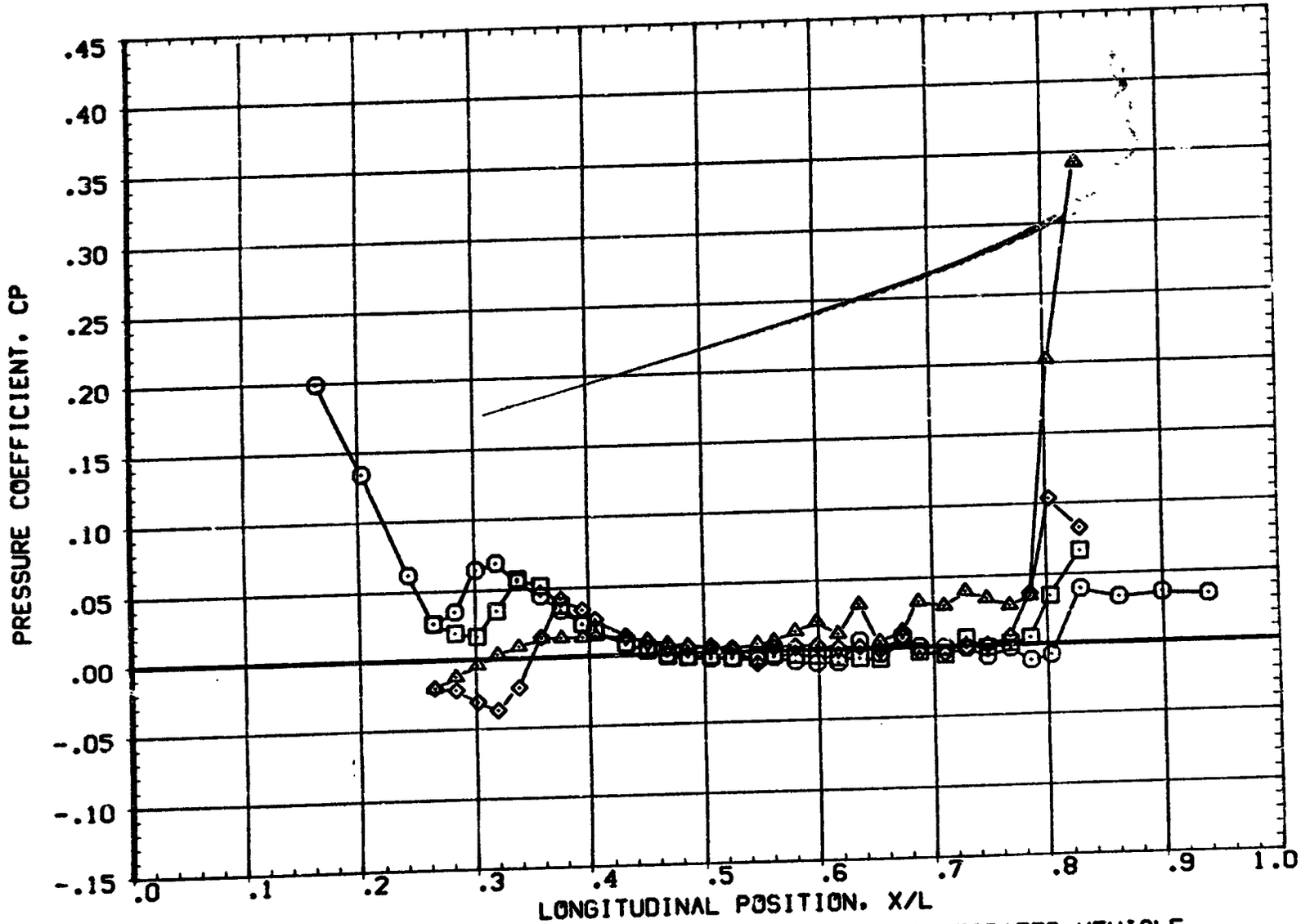


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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◇	110.000		
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PARAMETRIC VALUES
BETA .000 ELEVON .000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

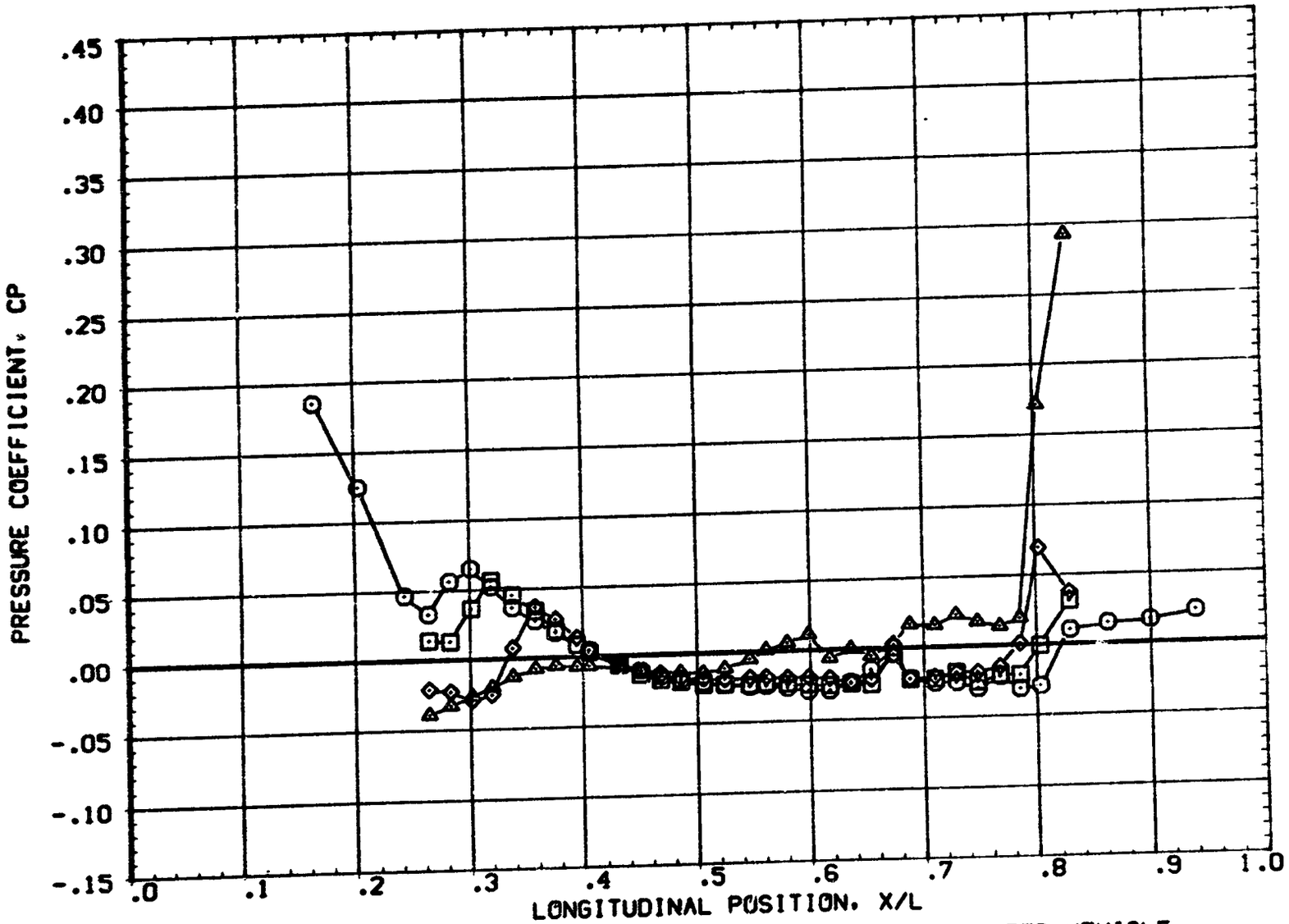
IA35 ORBITER ASCENT CONFIGURATION

(RQ5004)

PARAMETRIC VALUES

BETA .000 ELEVON .000

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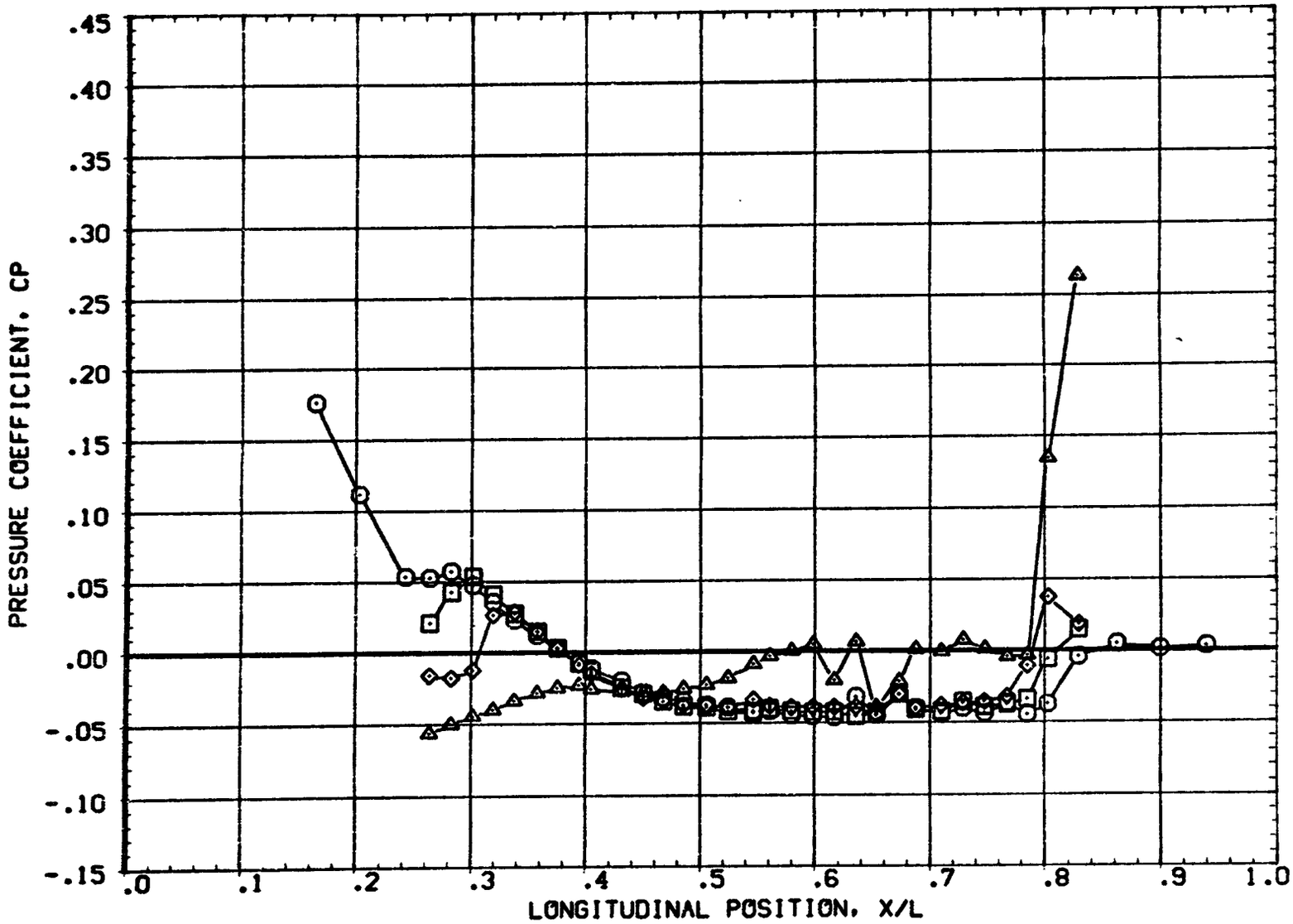
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IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON .000



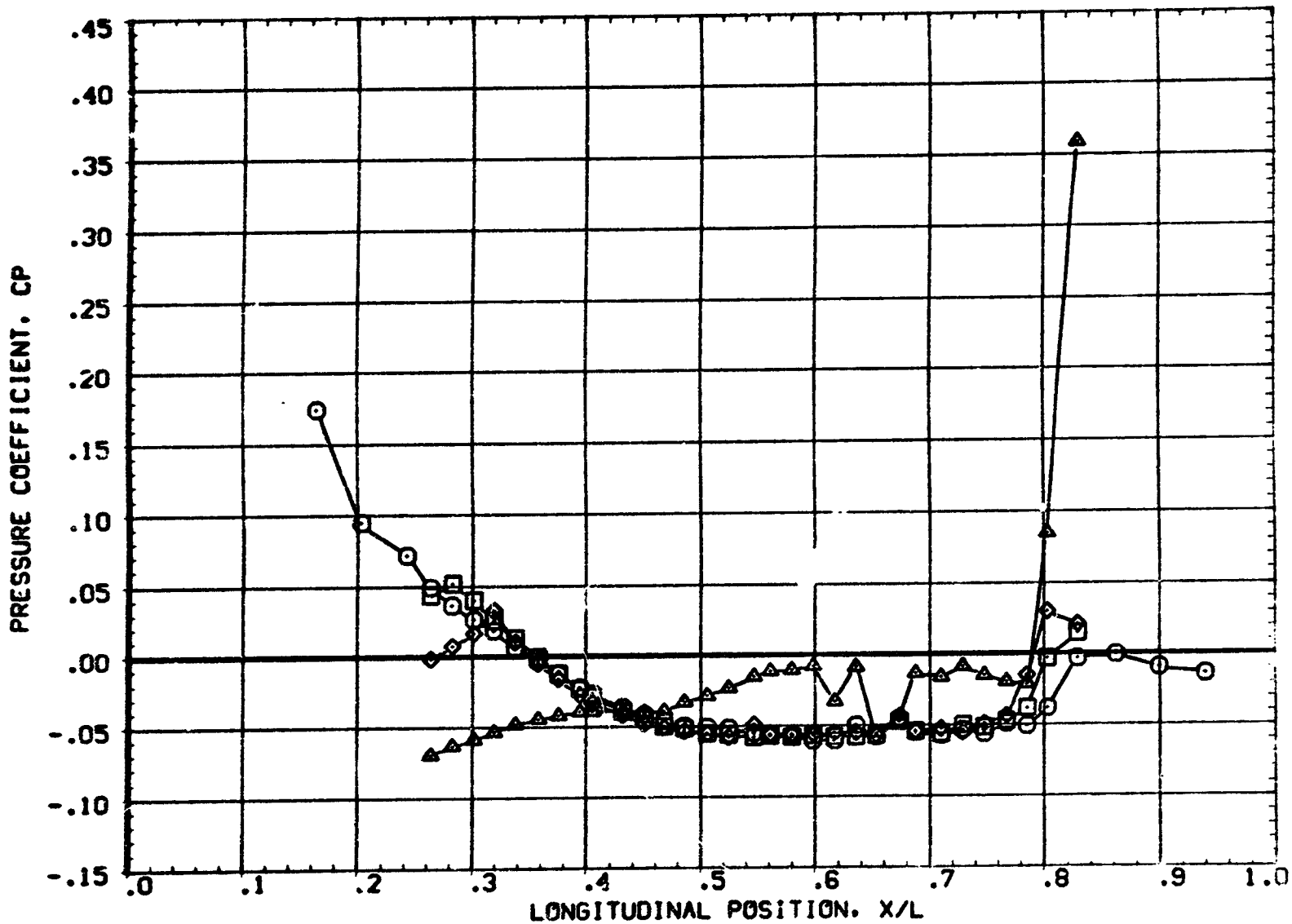
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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PARAMETRIC VALUES

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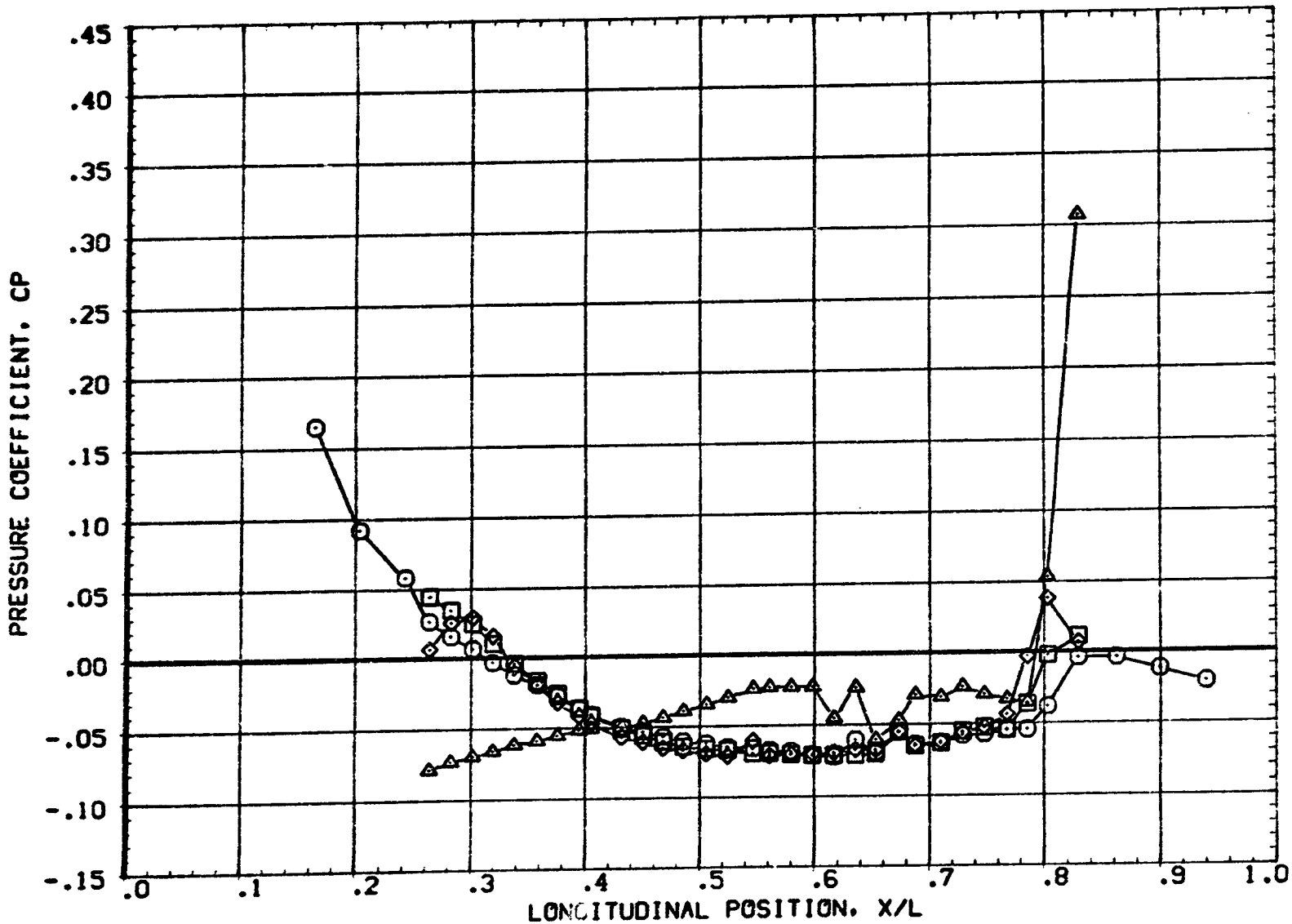


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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◇	110.000		
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PARAMETRIC VALUES
BETA .000 ELEVON .00



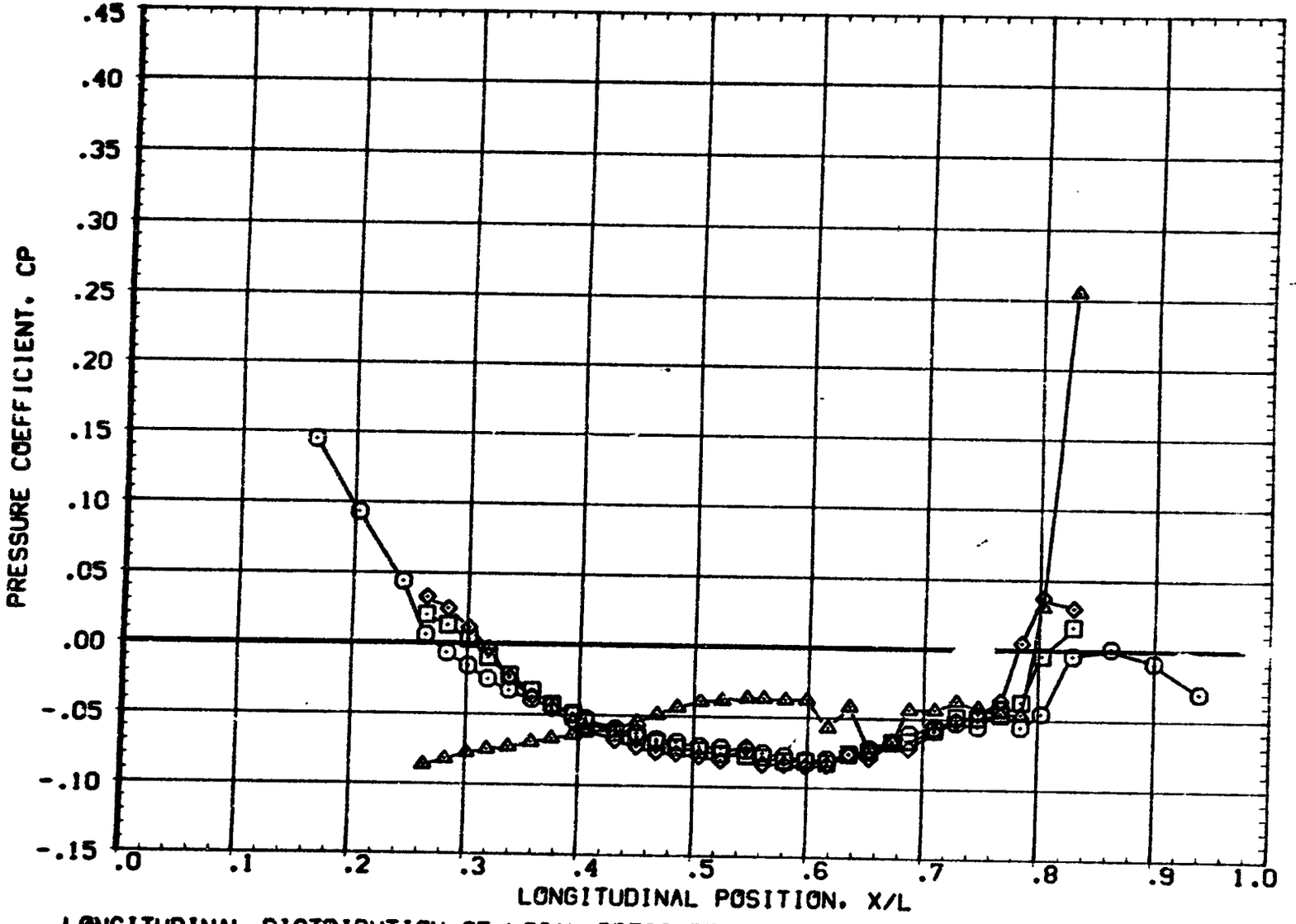
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IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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◇	110.000		
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PARAMETRIC VALUES

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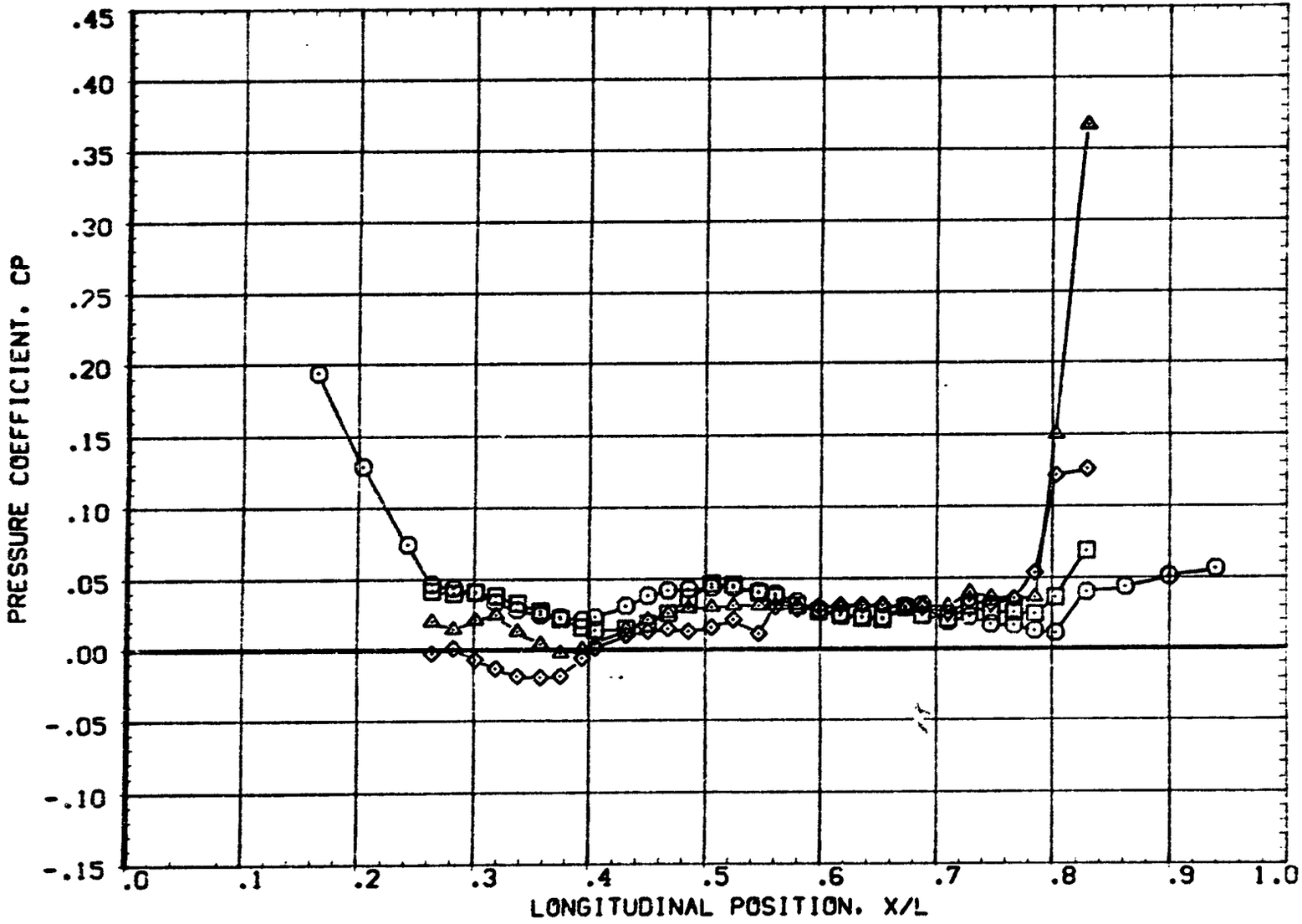
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IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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PARAMETRIC VALUES

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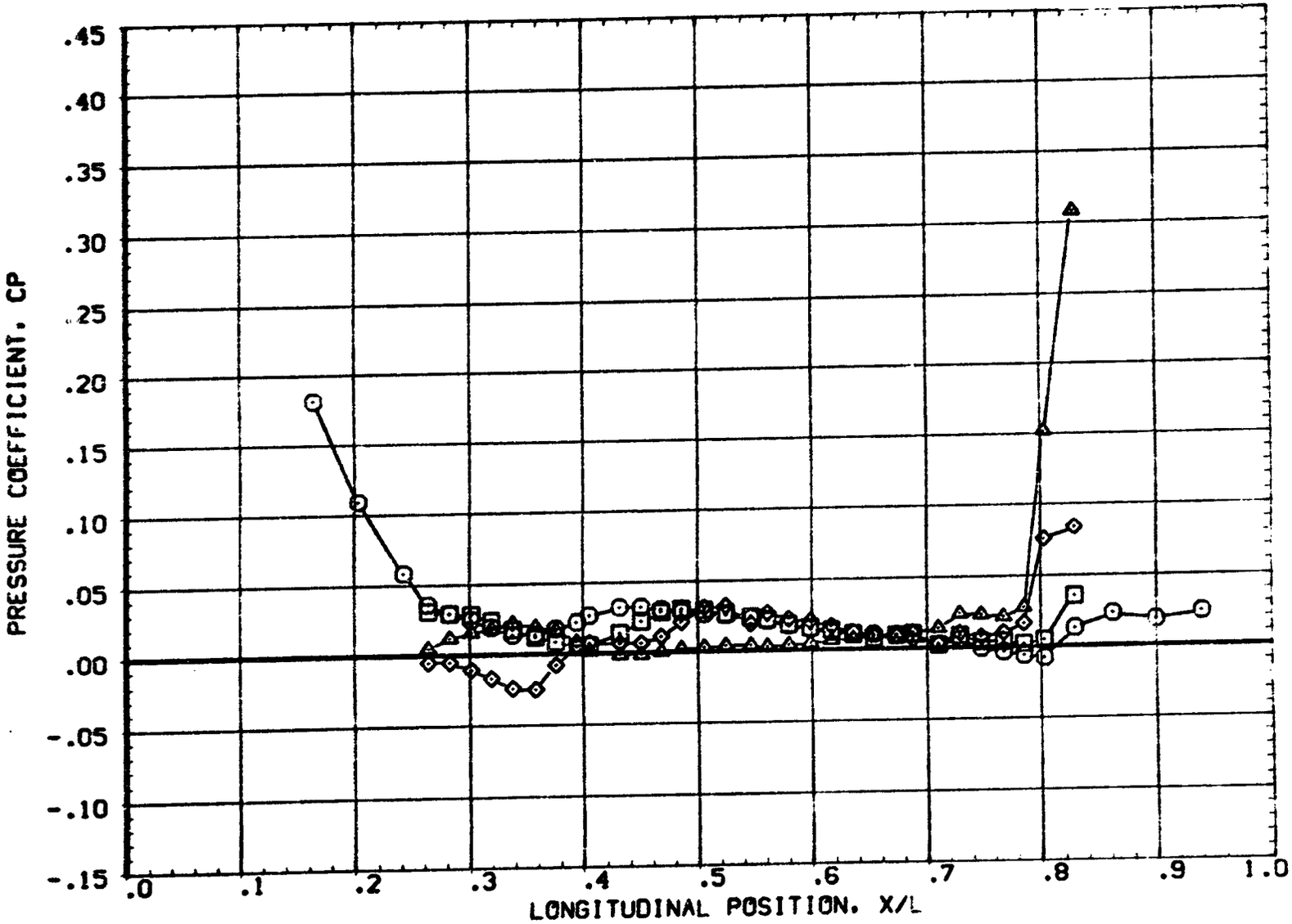


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	PHI	ALPHA	MACH
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	110.000		
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PARAMETRIC VALUES
BETA .000 ELEVON .000



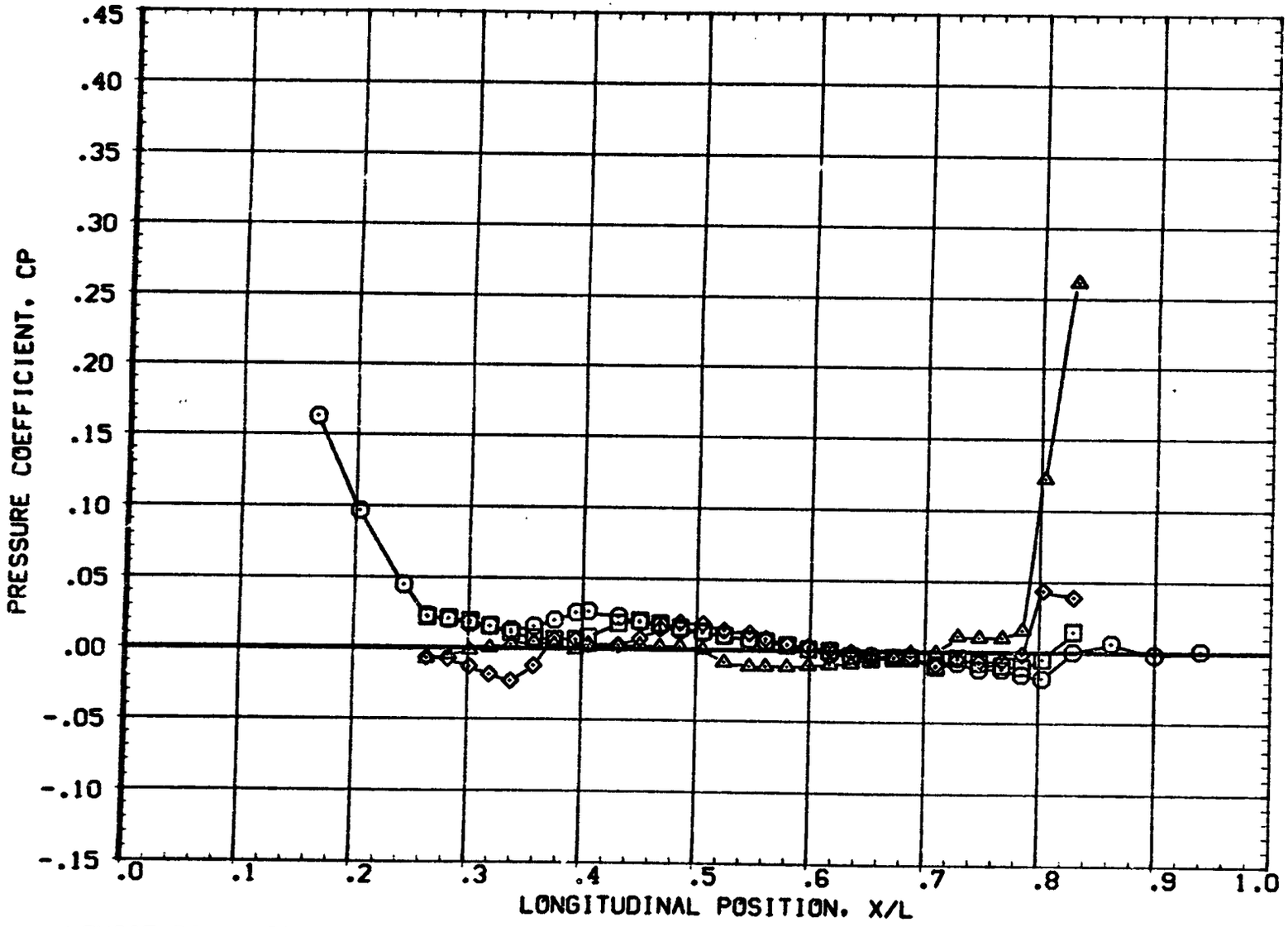
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IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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PARAMETRIC VALUES

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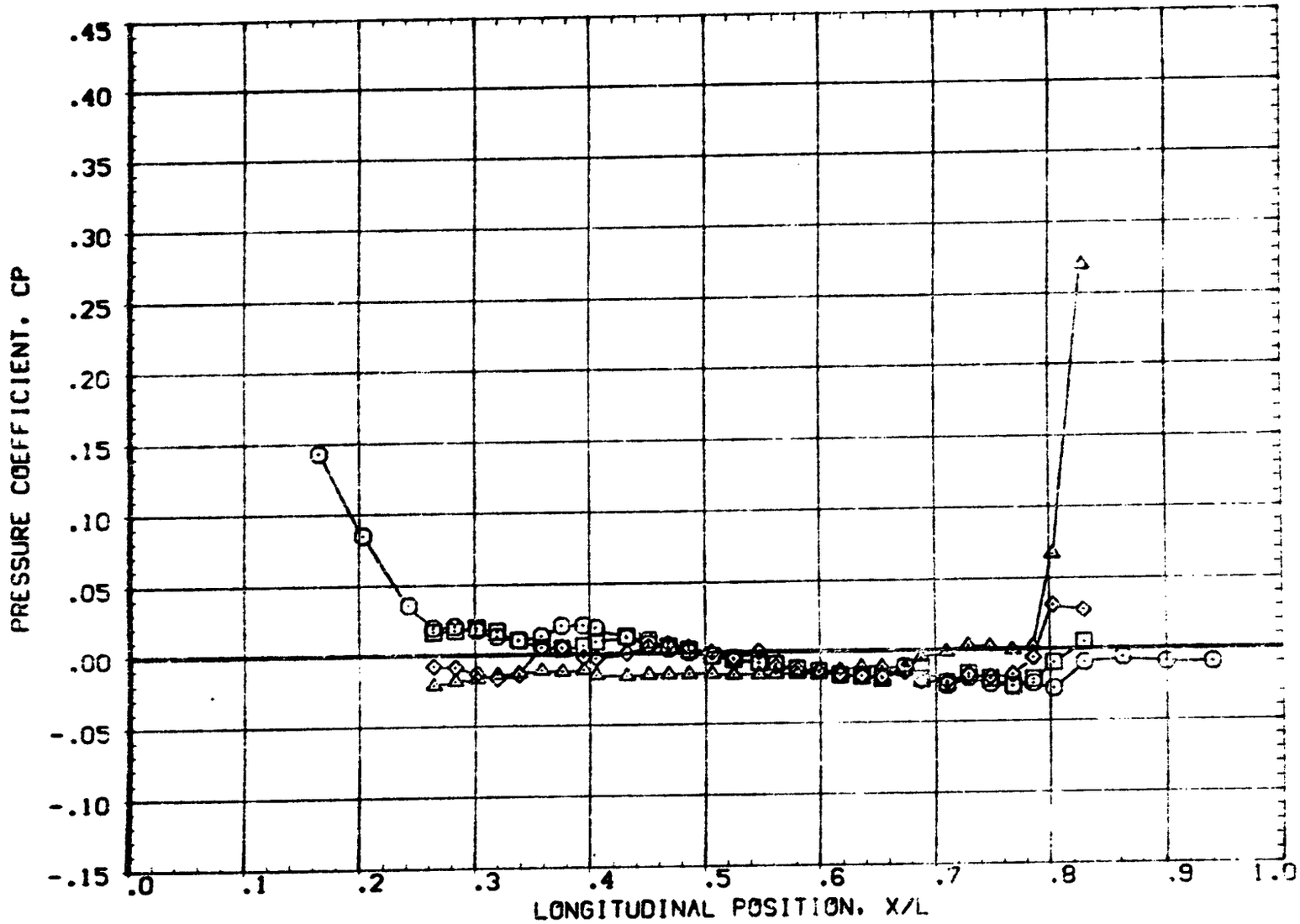
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IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON .000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

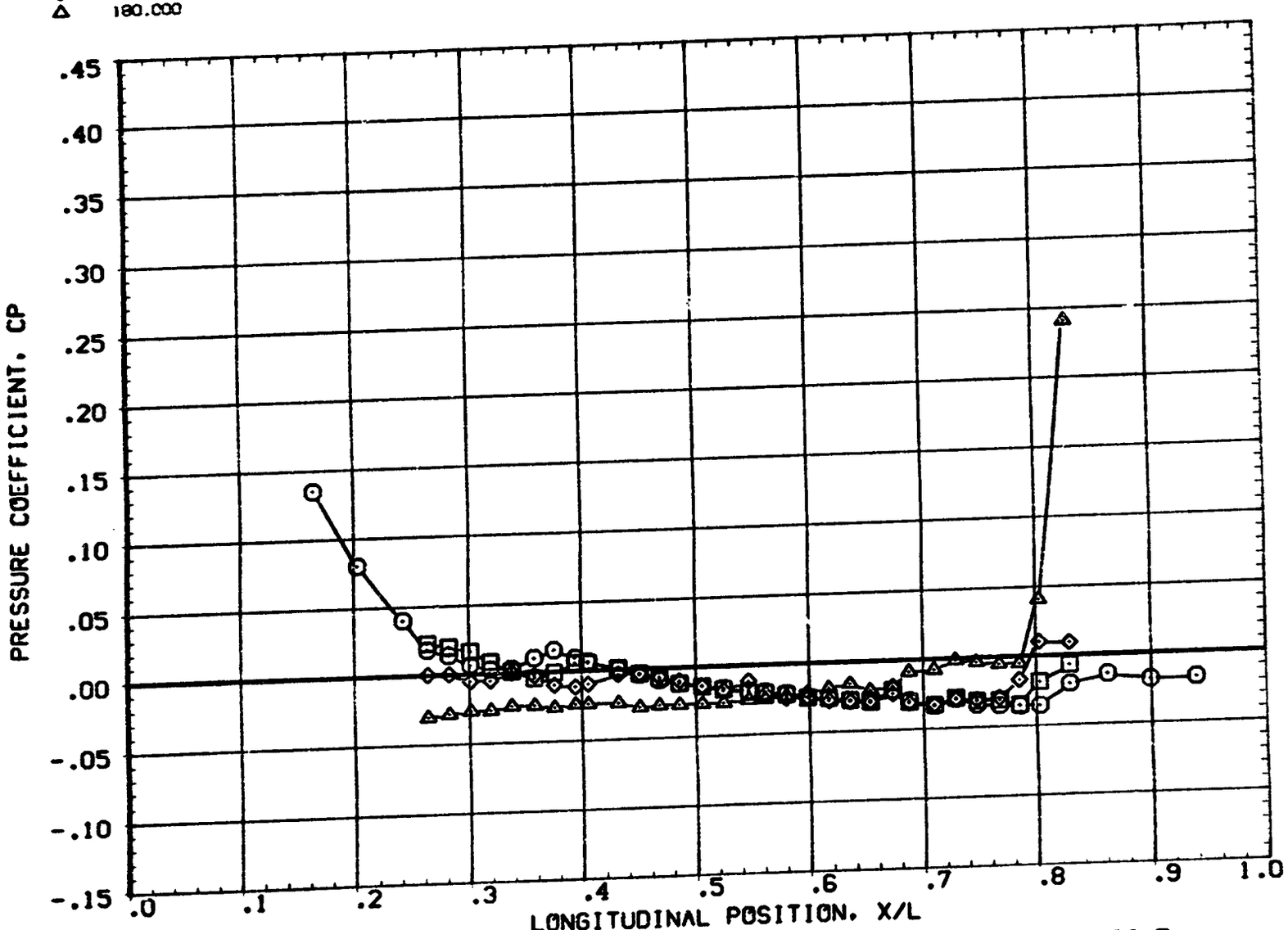
IA35 ORBITER ASCENT CONFIGURATION

(RQ5004)

PARAMETRIC VALUES

BETA .000 ELEVON .000

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□	100.000		
◇	110.000		
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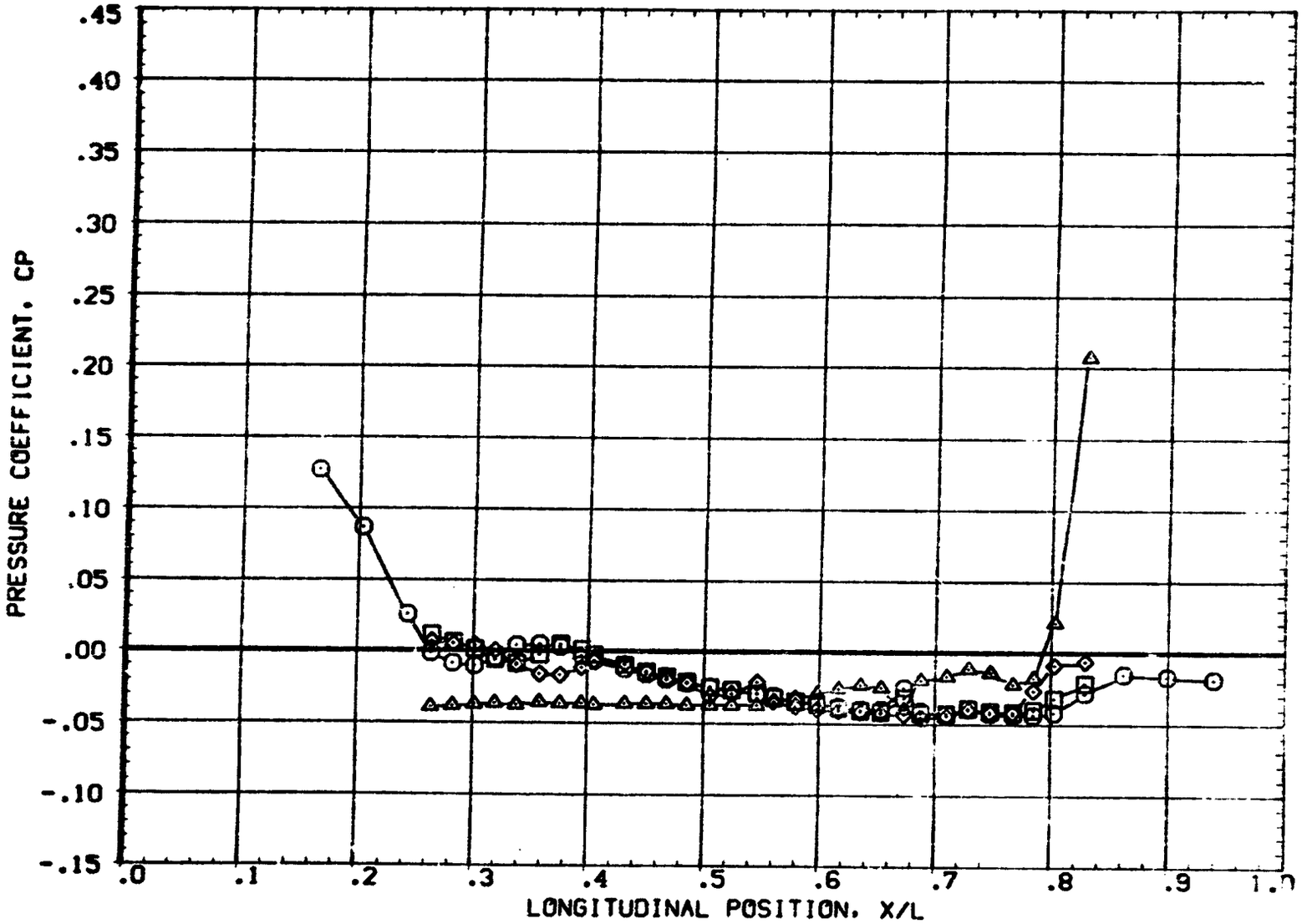
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IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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PARAMETRIC VALUES

BETA .000 ELEVON .000



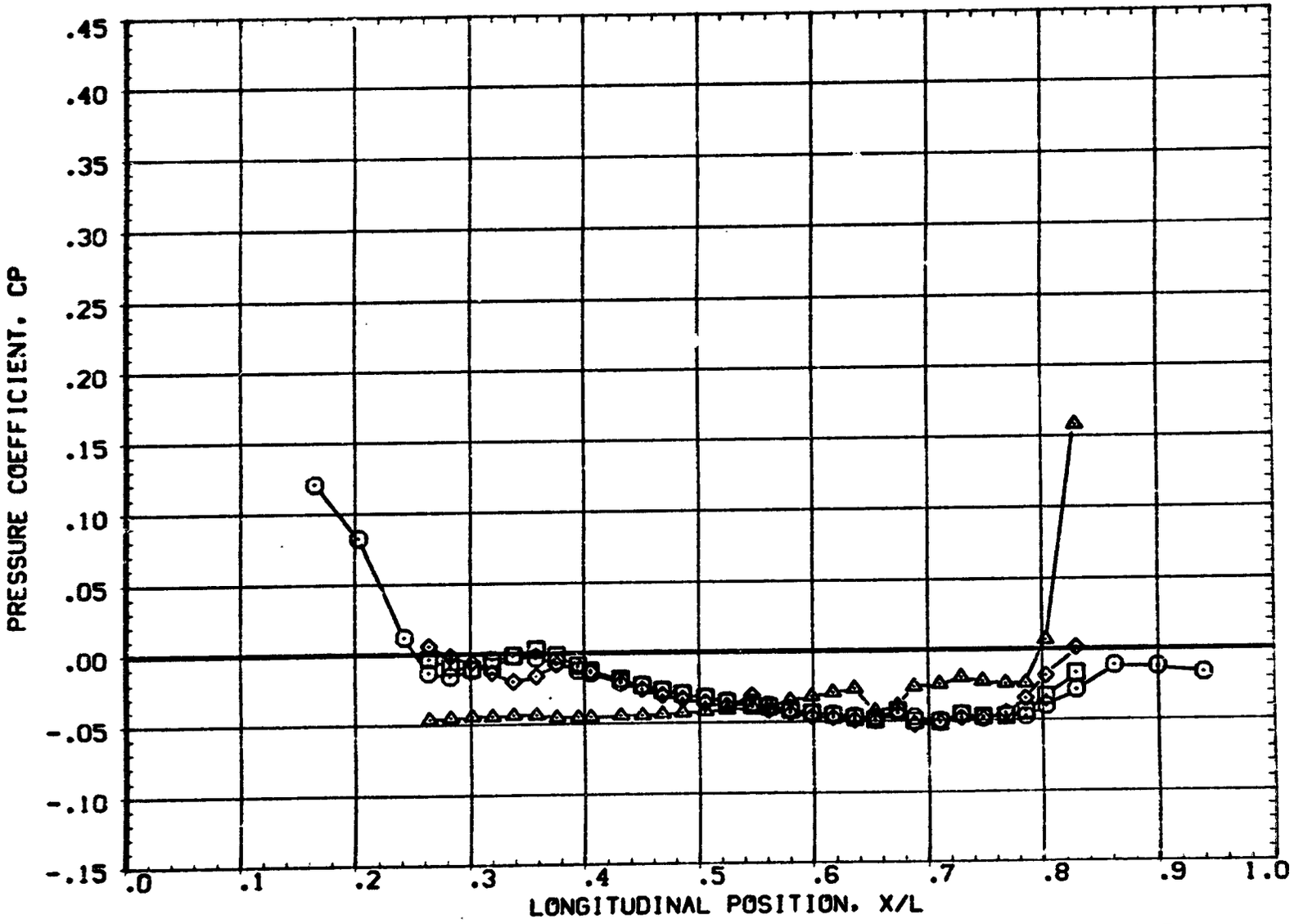
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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PARAMETRIC VALUES

BETA .000 ELEVON .000



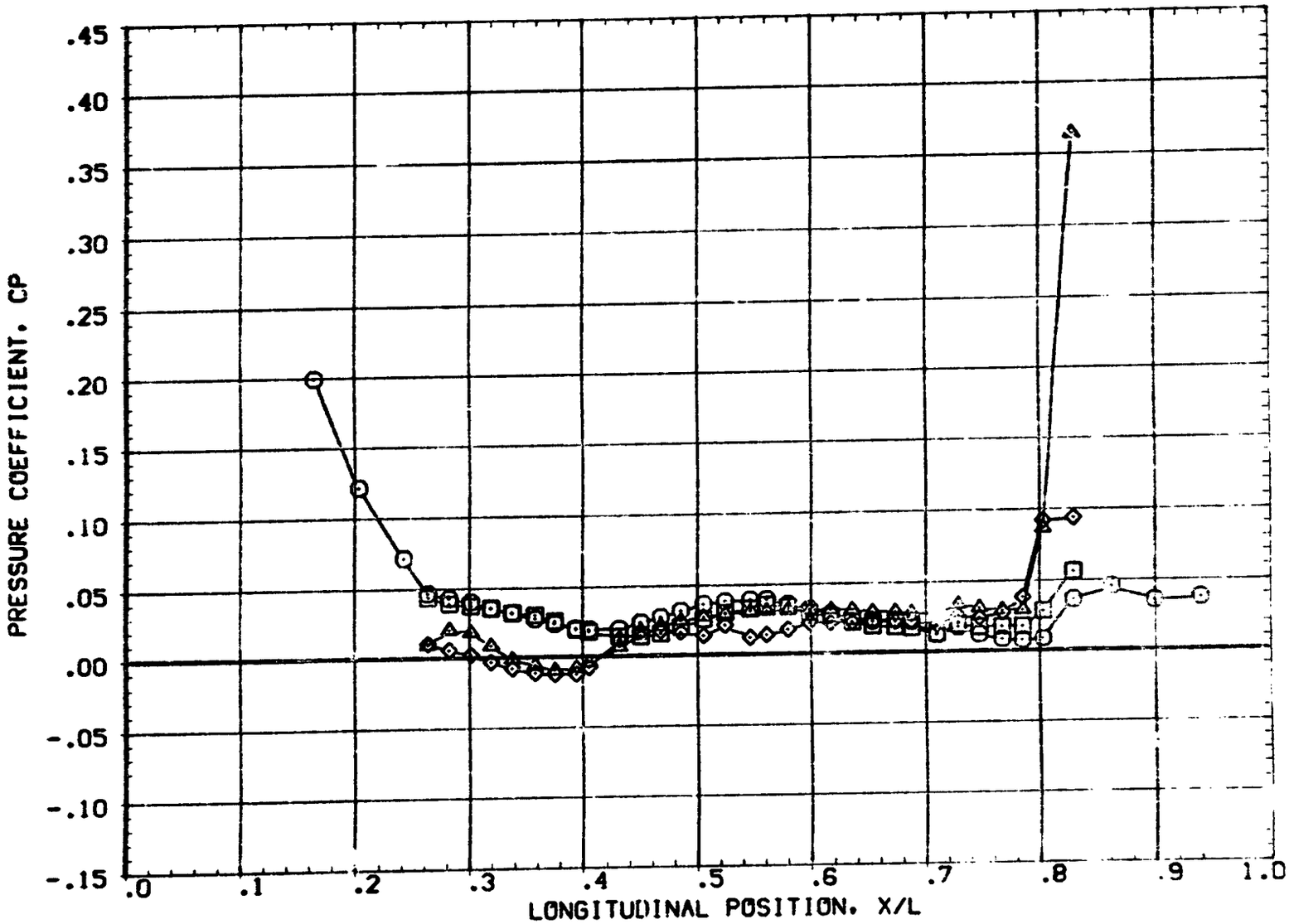
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IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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PARAMETRIC VALUES

BETA .000 ELEVON .000



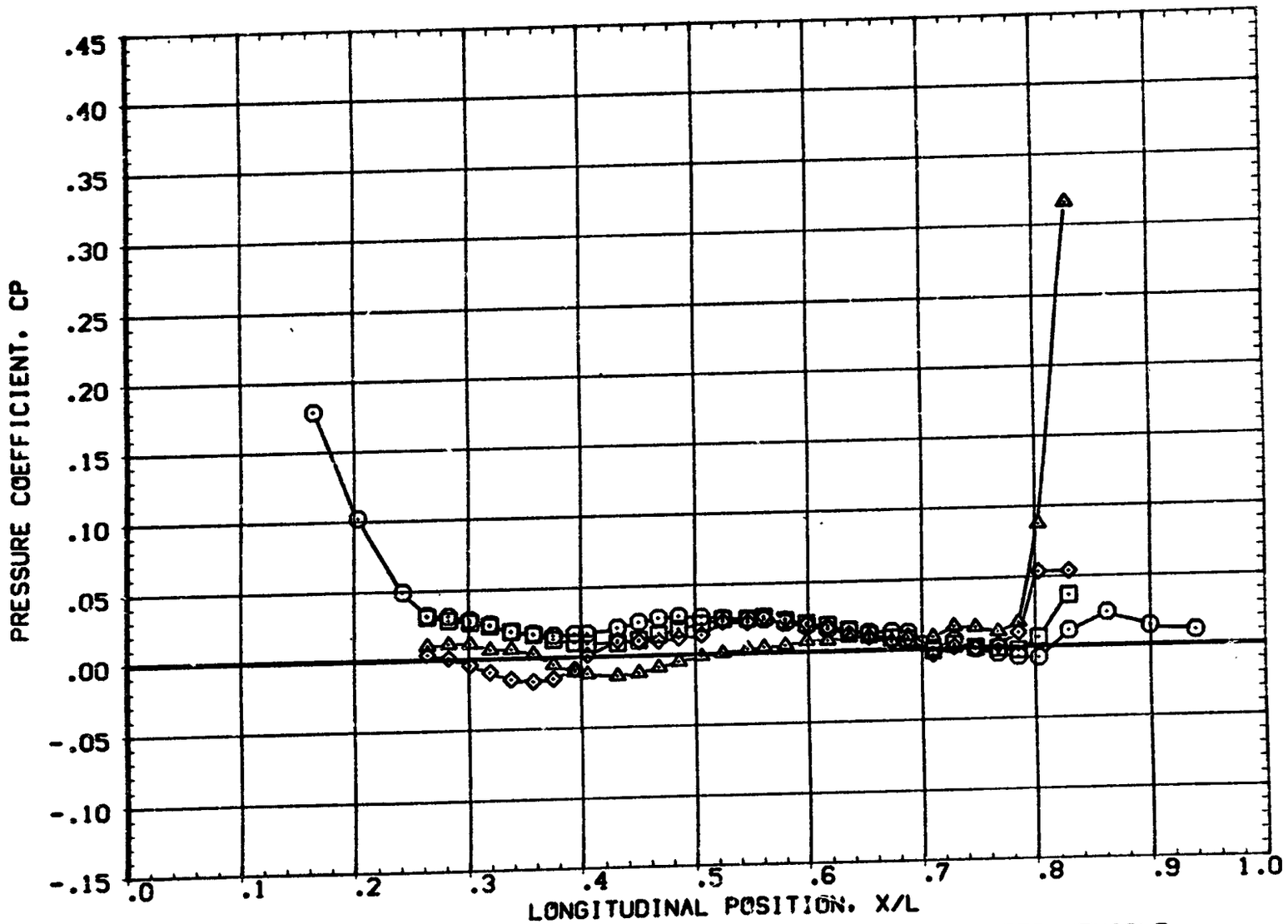
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IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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PARAMETRIC VALUES

BETA .000 ELEVON .000



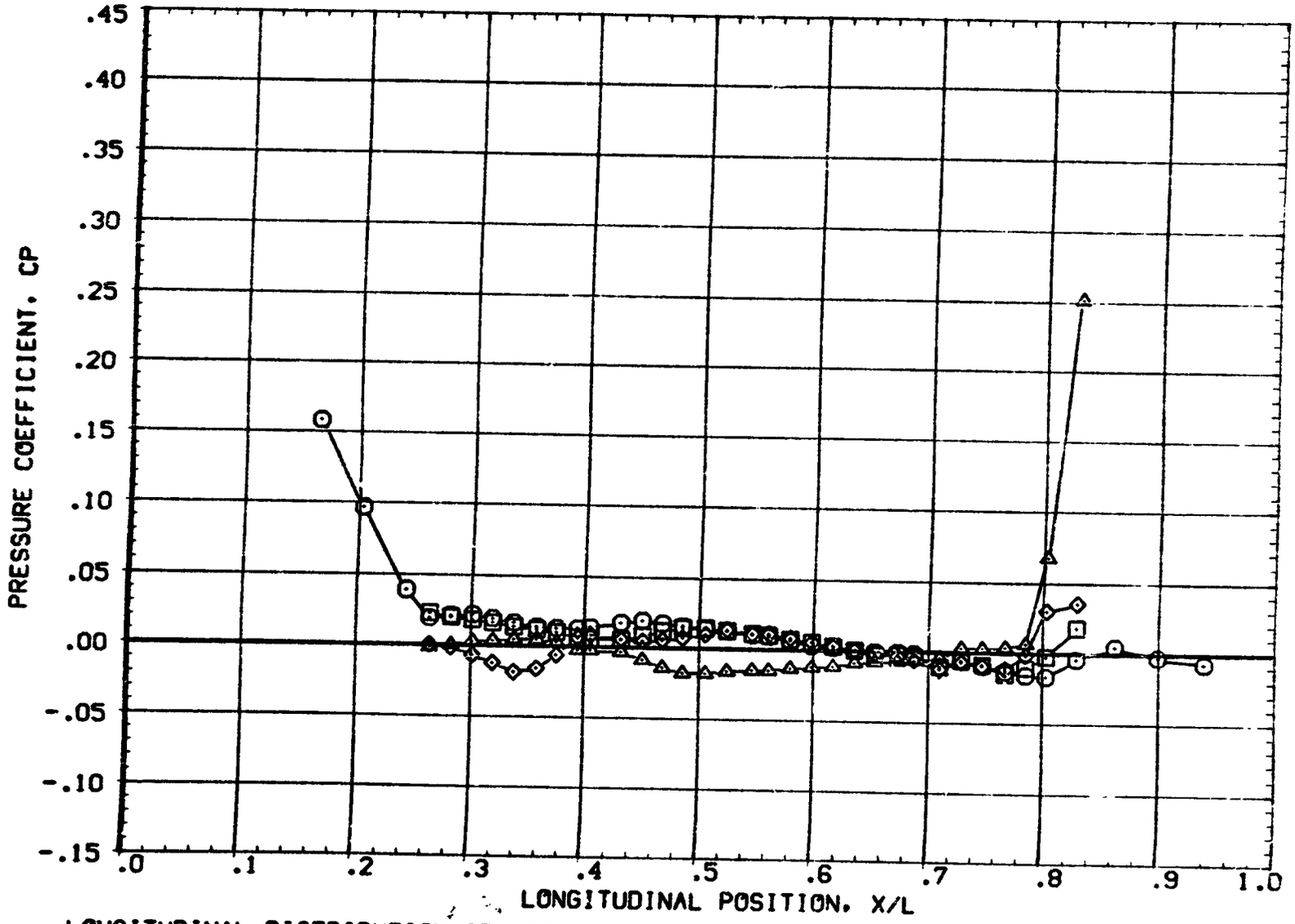
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IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON .000

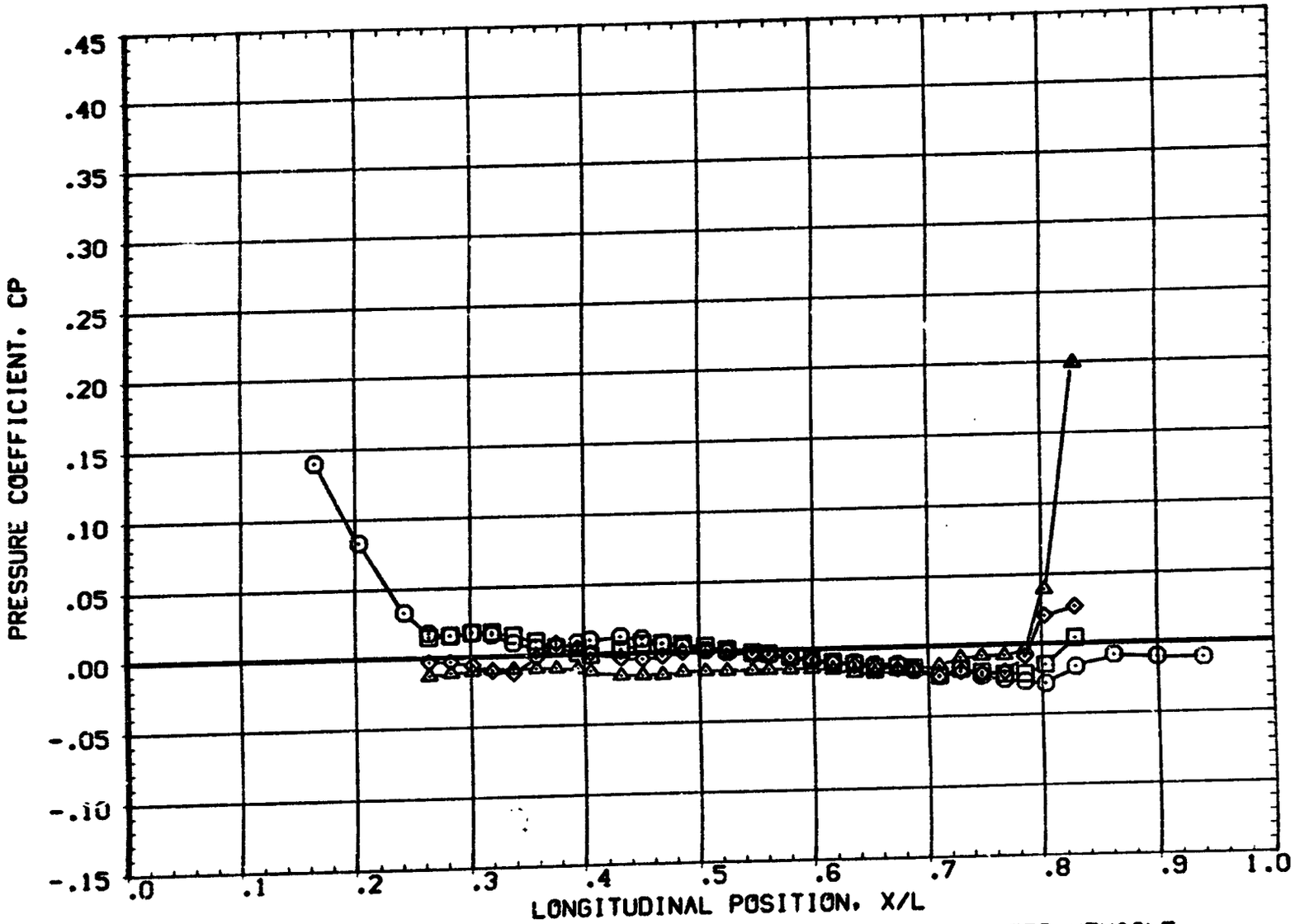


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	PHI	ALPHA	MACH
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□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES
BETA .000 ELEVON .000



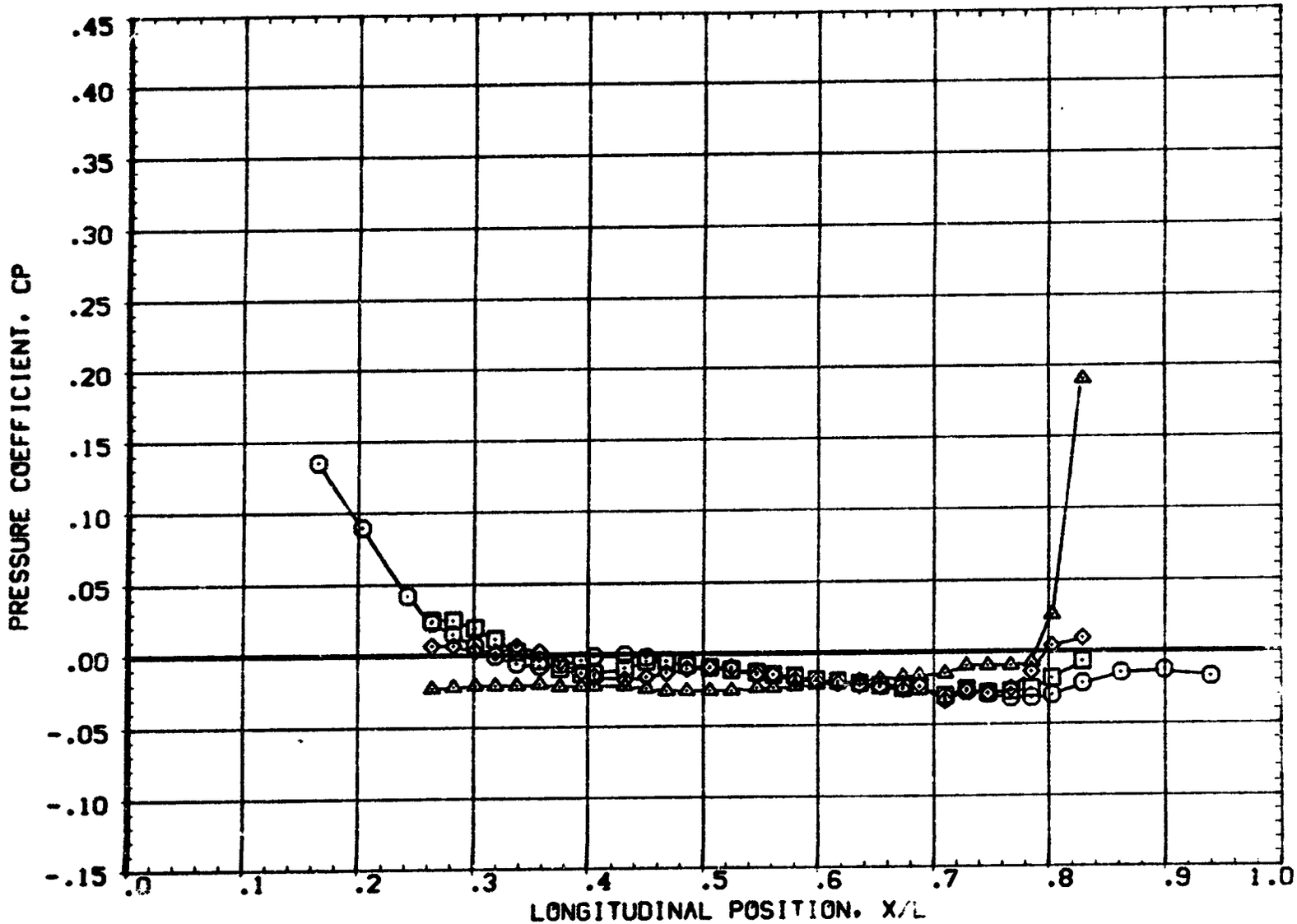
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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PARAMETRIC VALUES

BETA .000 ELEVON .000



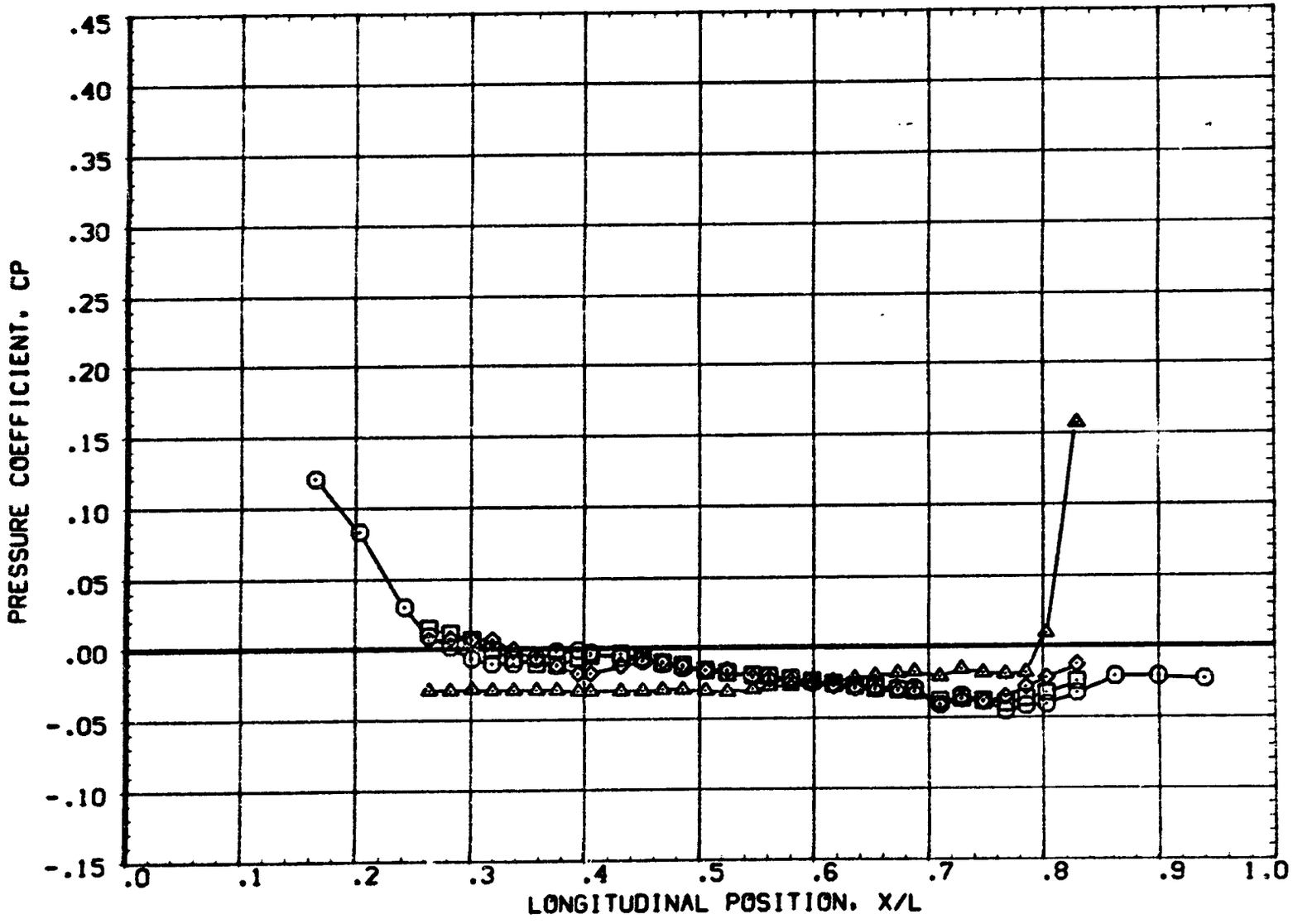
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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PARAMETRIC VALUES

BETA .000 ELEVON .000



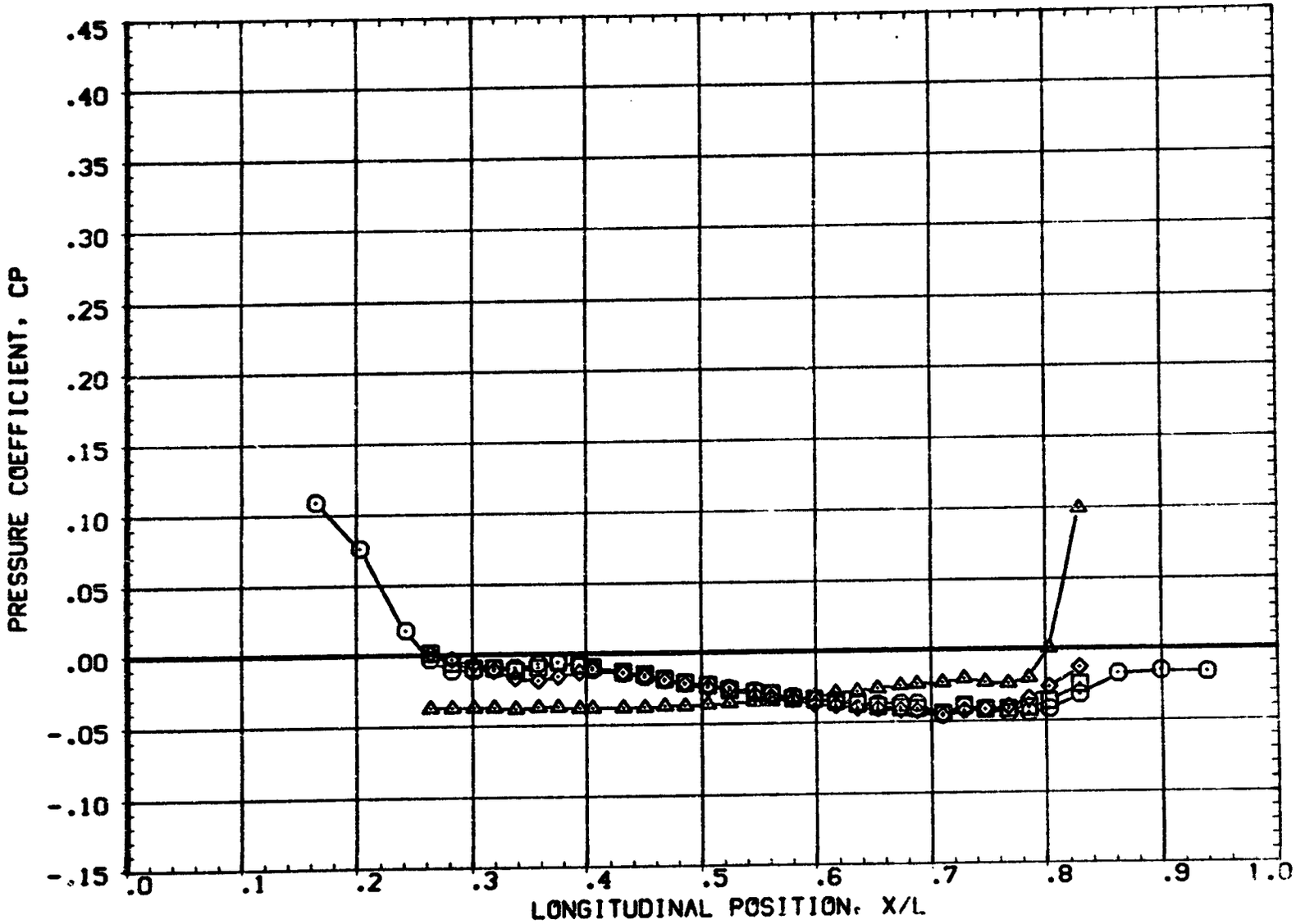
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IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

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PARAMETRIC VALUES

BETA .000 ELEVON .000



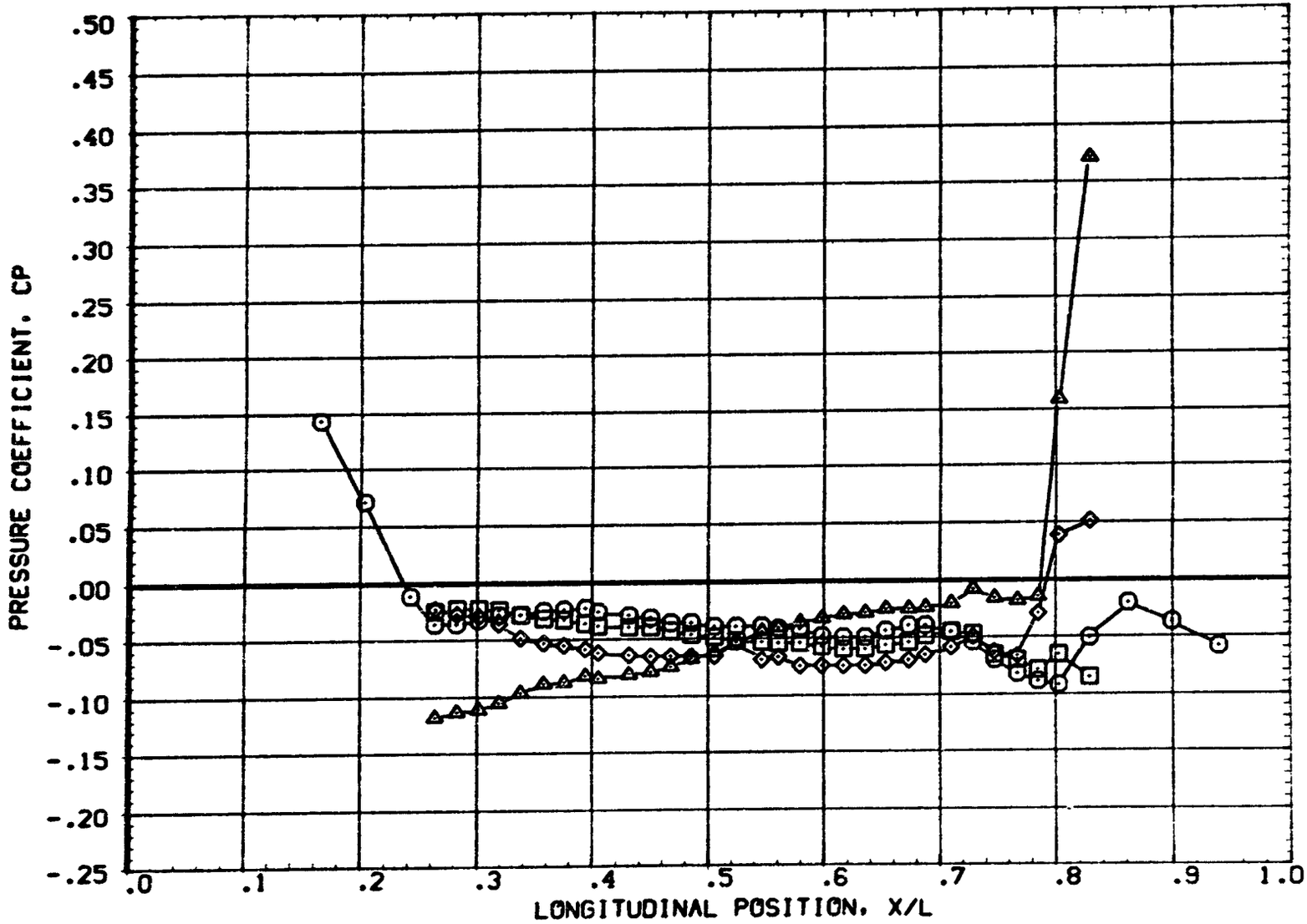
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

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PARAMETRIC VALUES

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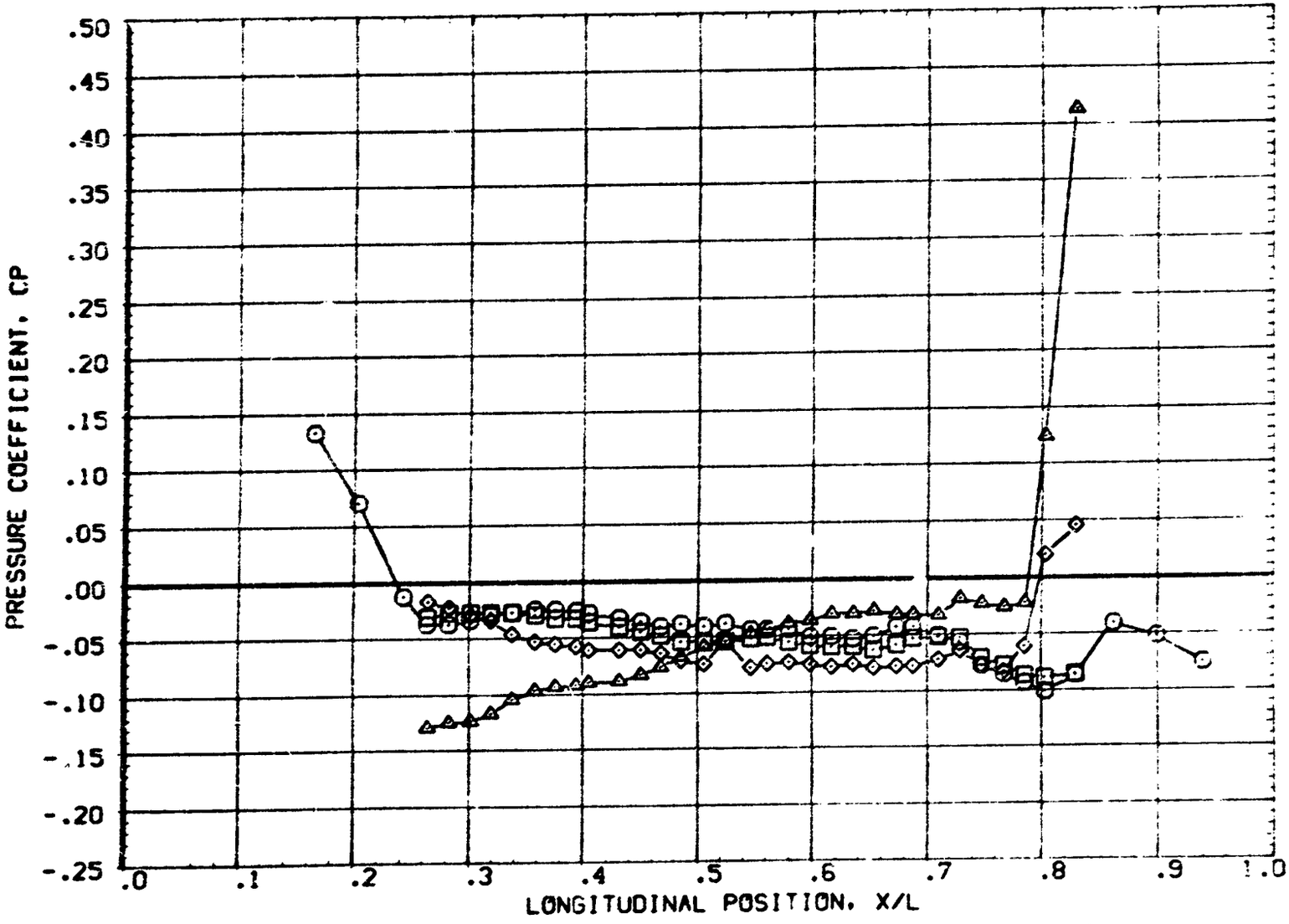
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

CA64 ORBITER ENTRY CONFIGURATION (RG4004)

SYMBOL	PHI	ALPHA	MACH
□	90.000	[illegible]	2.500
○	100.000		
◇	[illegible]		
△	80.000		

PARAMETRIC VALUES

DELTA .000 [illegible]



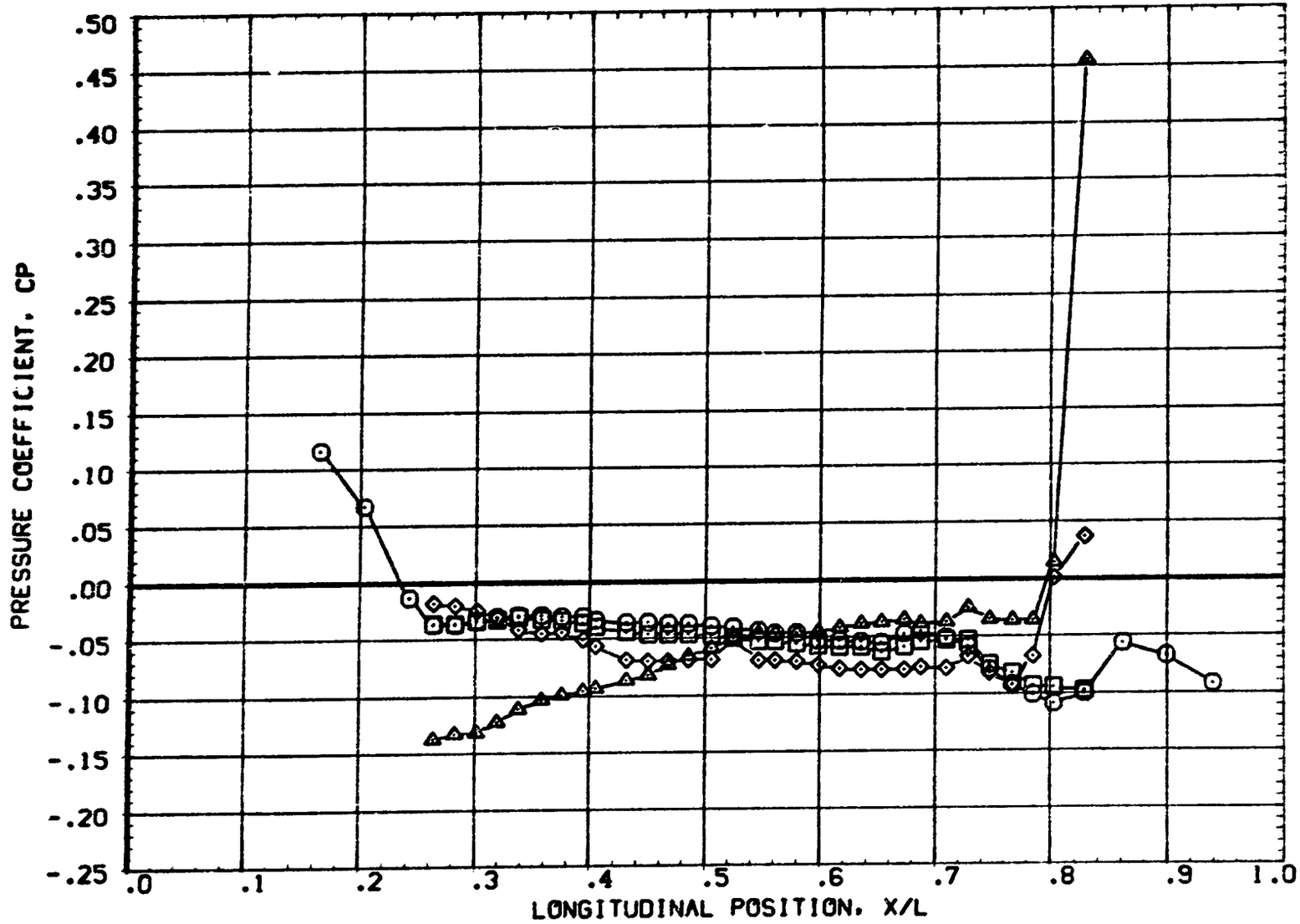
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
	90.000	12.010	2.500
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

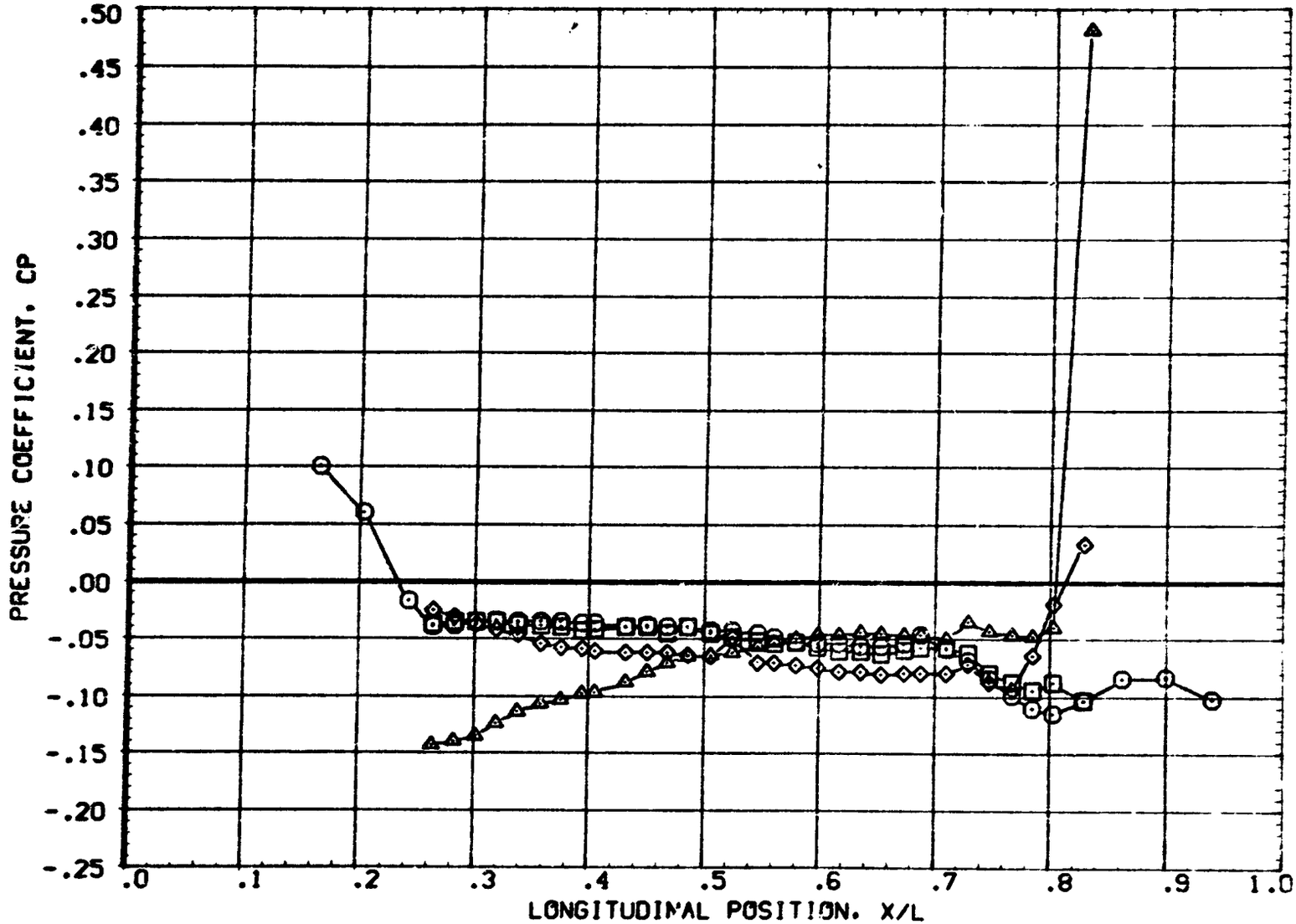


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RG4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	14.000	2.500
□	100.000		
◇	110.000		
△	160.000		

PARAMETRIC VALUES
BETA .000 ELEVON -15.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

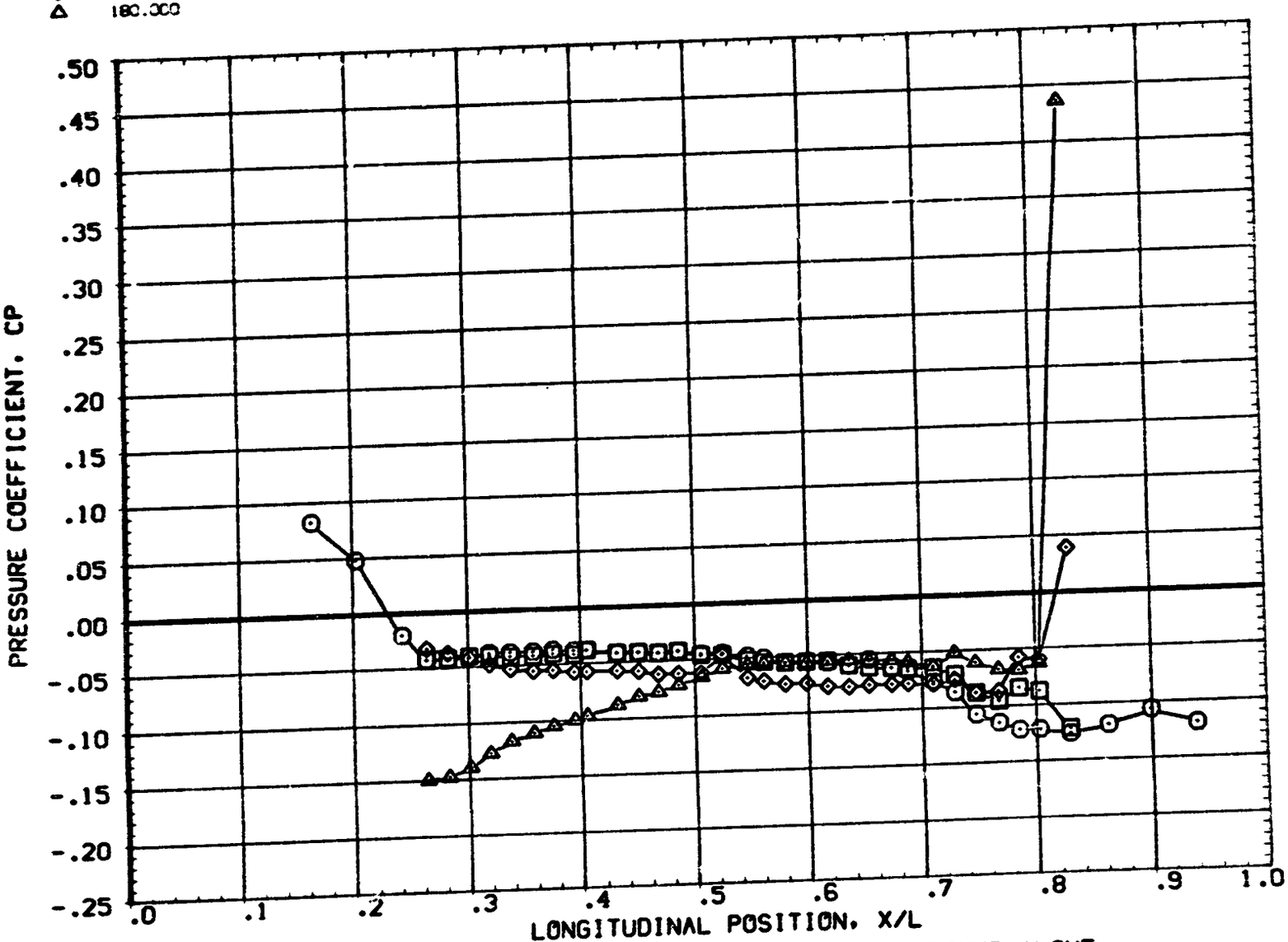
CA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

SYMBOL	PHI	ALPHA	MACH
△	90.000	16.000	2.500
◇	100.000		
□	110.000		
○	180.000		



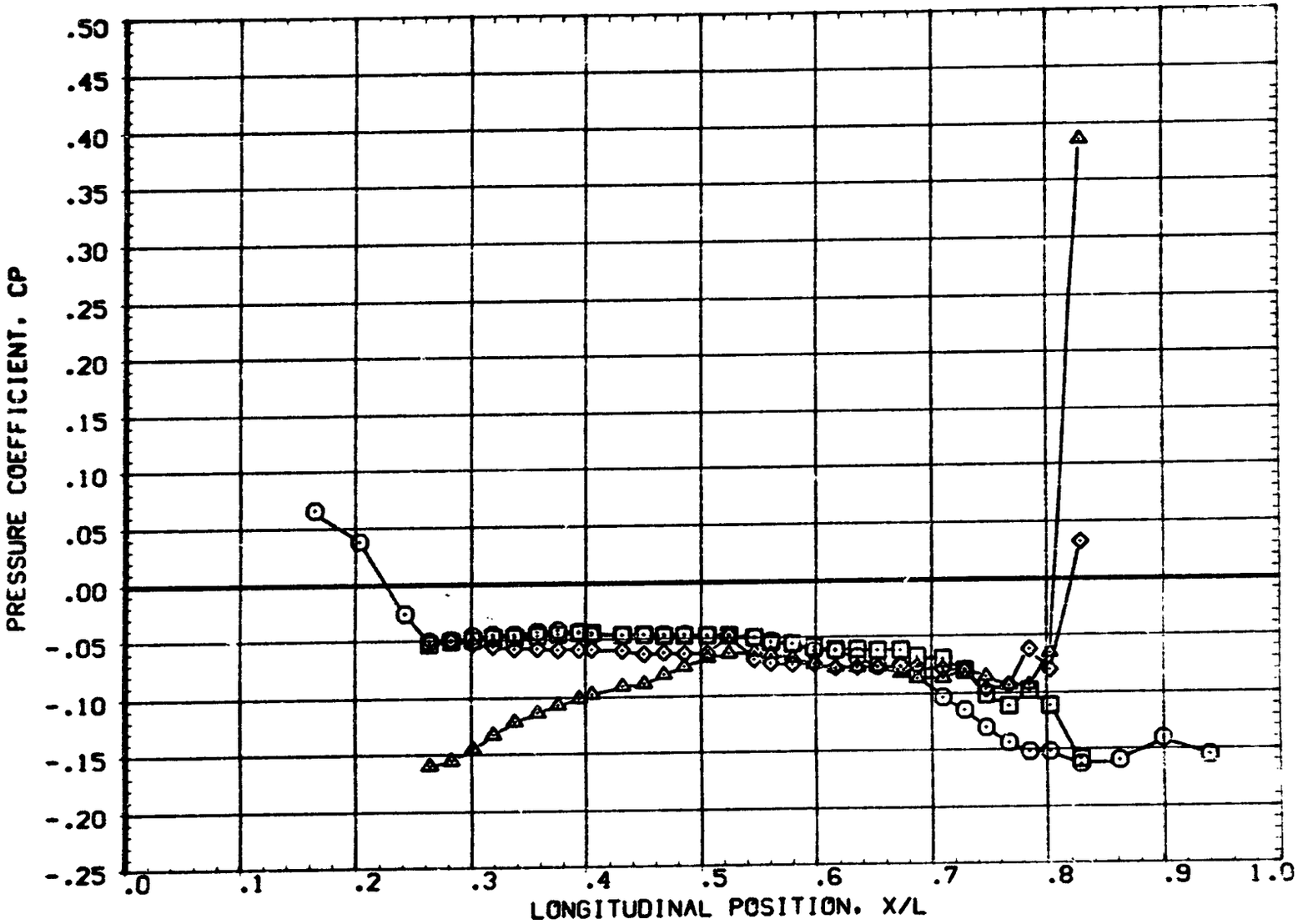
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	18.000	2.500
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



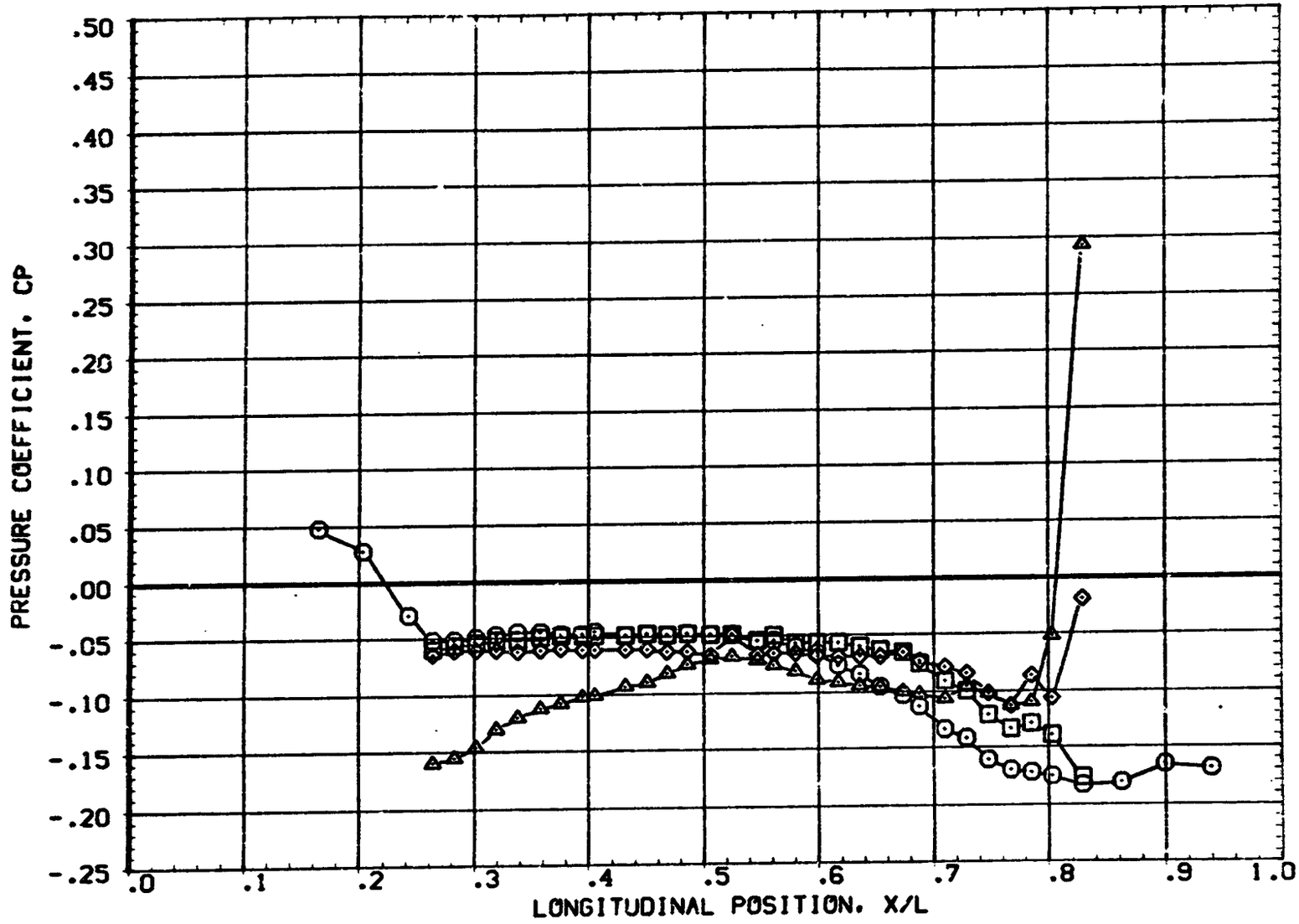
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

CA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
-	90.000	20.000	2.500
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◇	110.000		
△	120.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

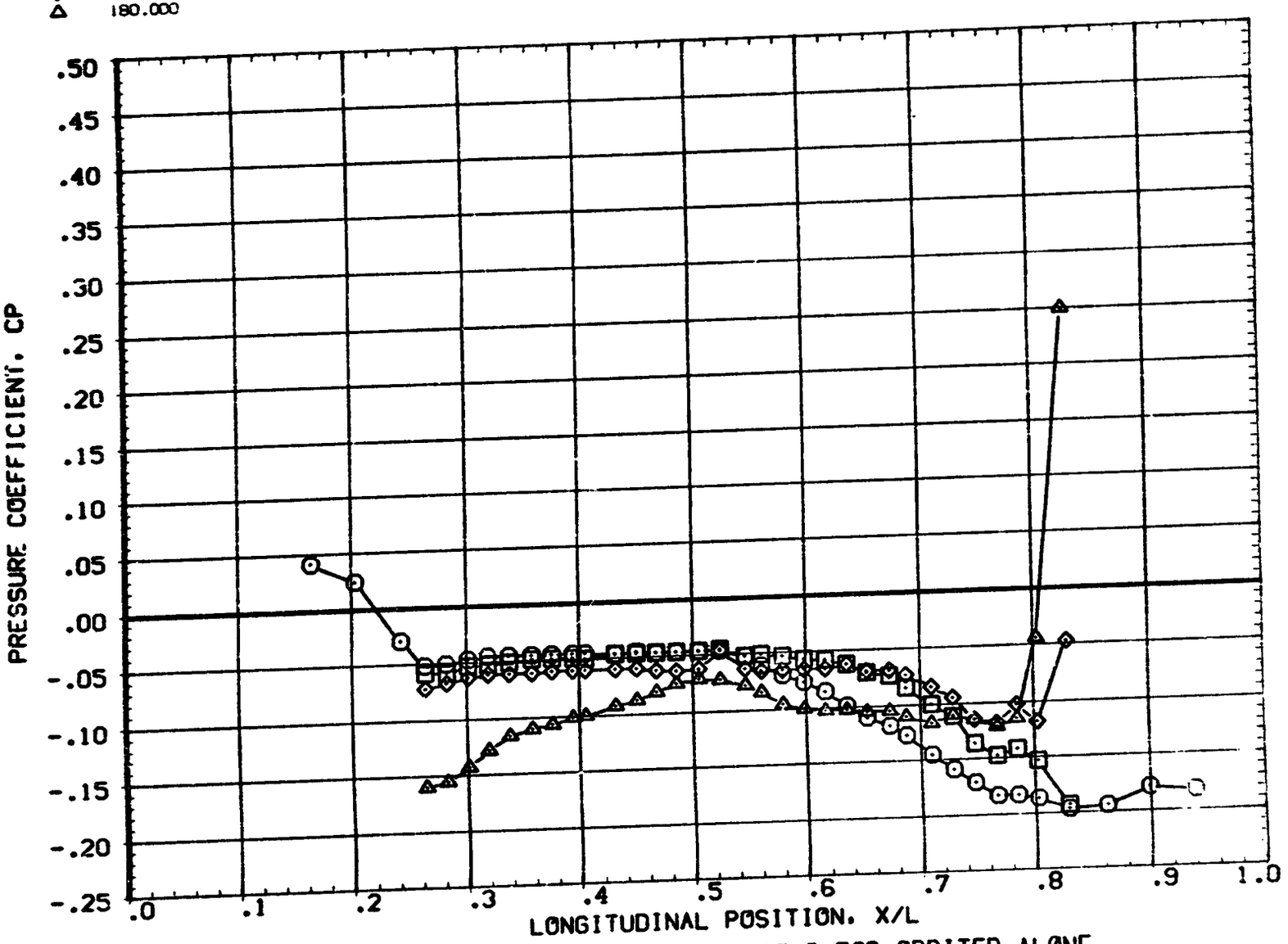


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

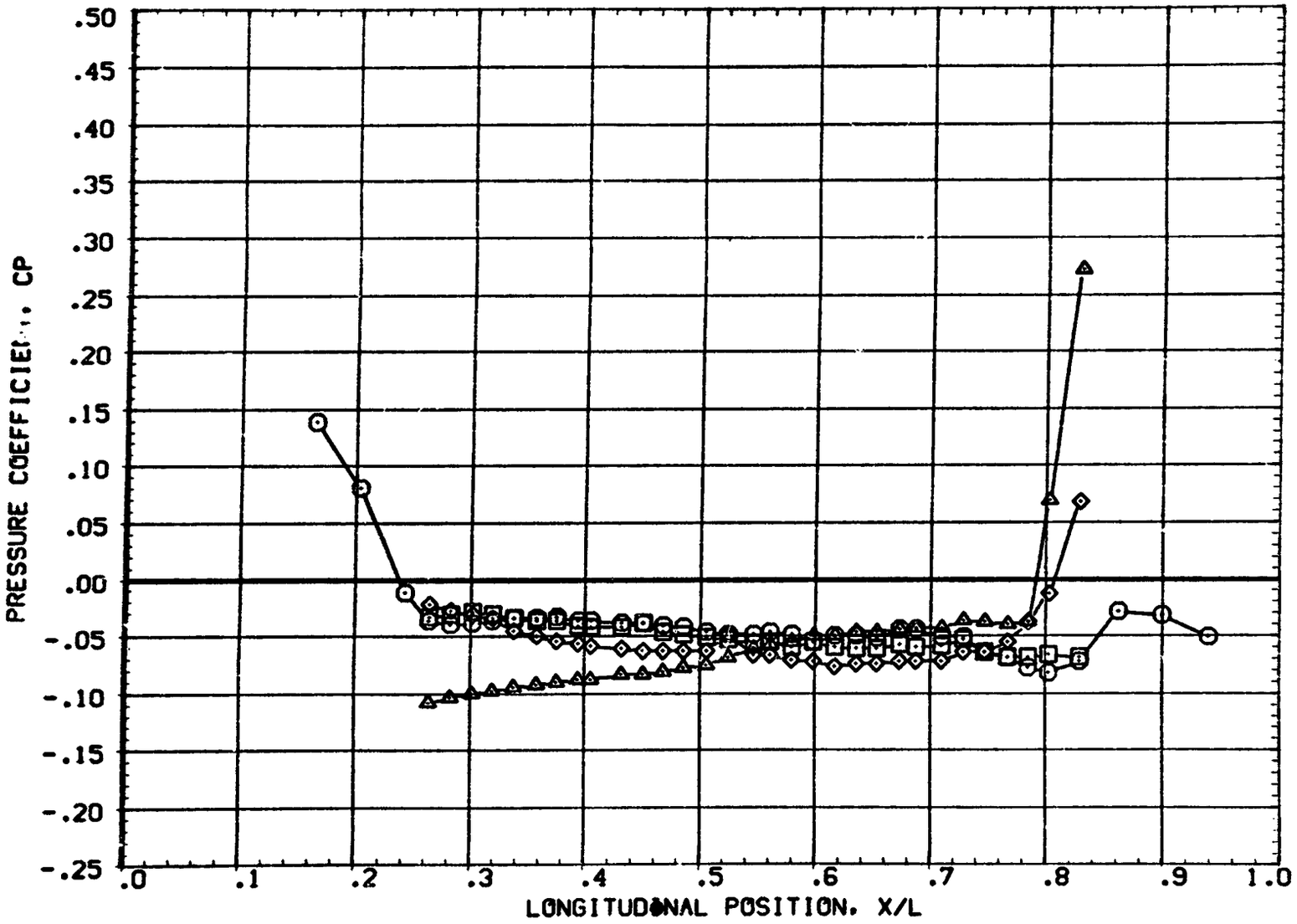
OA64 ORBITER ENTRY CONFIGURATION

SYMBOL	PHI	ALPHA	MACH
○	90.000	20.990	2.500
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES
BETA .000 ELEVON -15.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



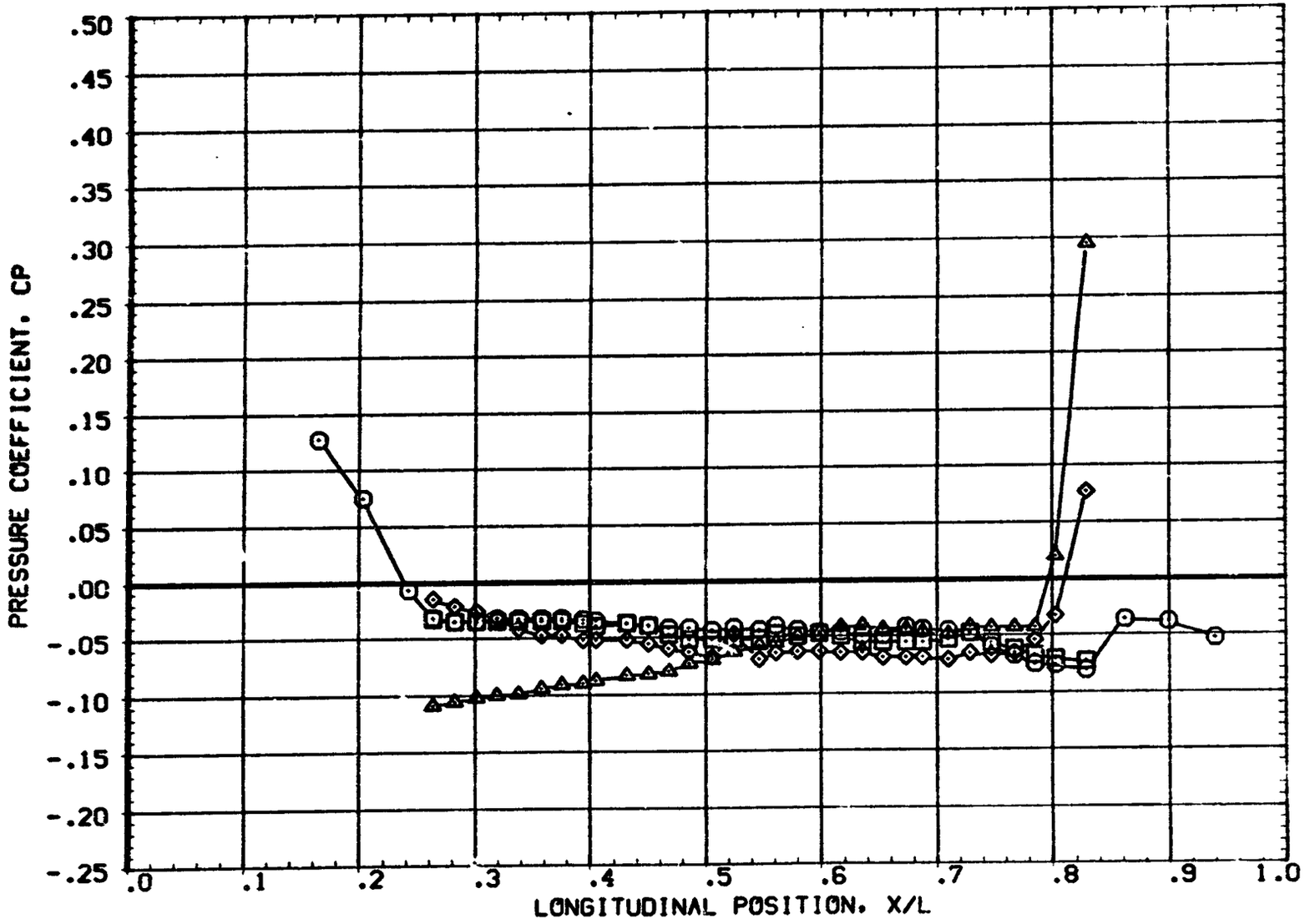
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	10.000	2.950
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



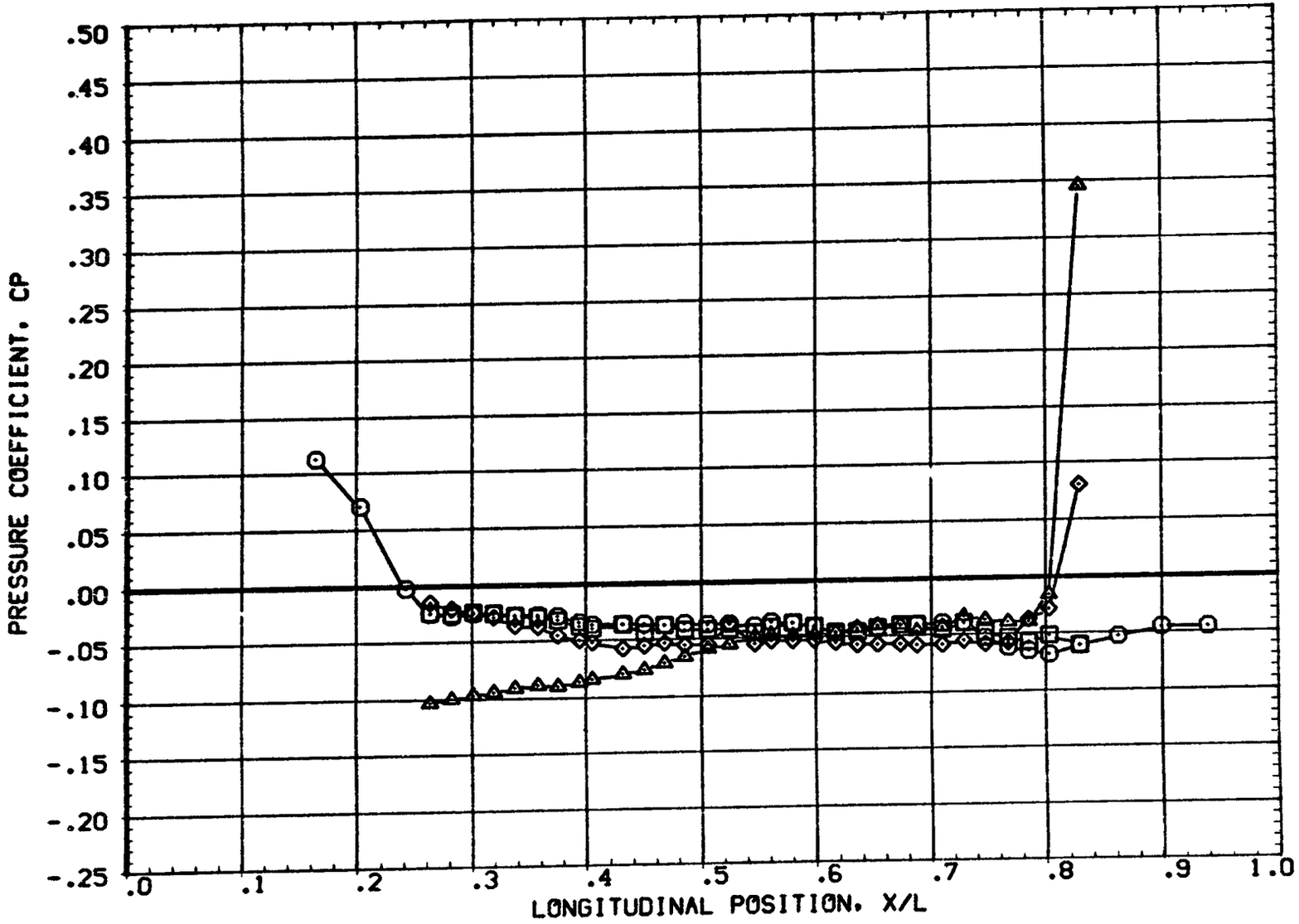
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	12.010	2.950
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



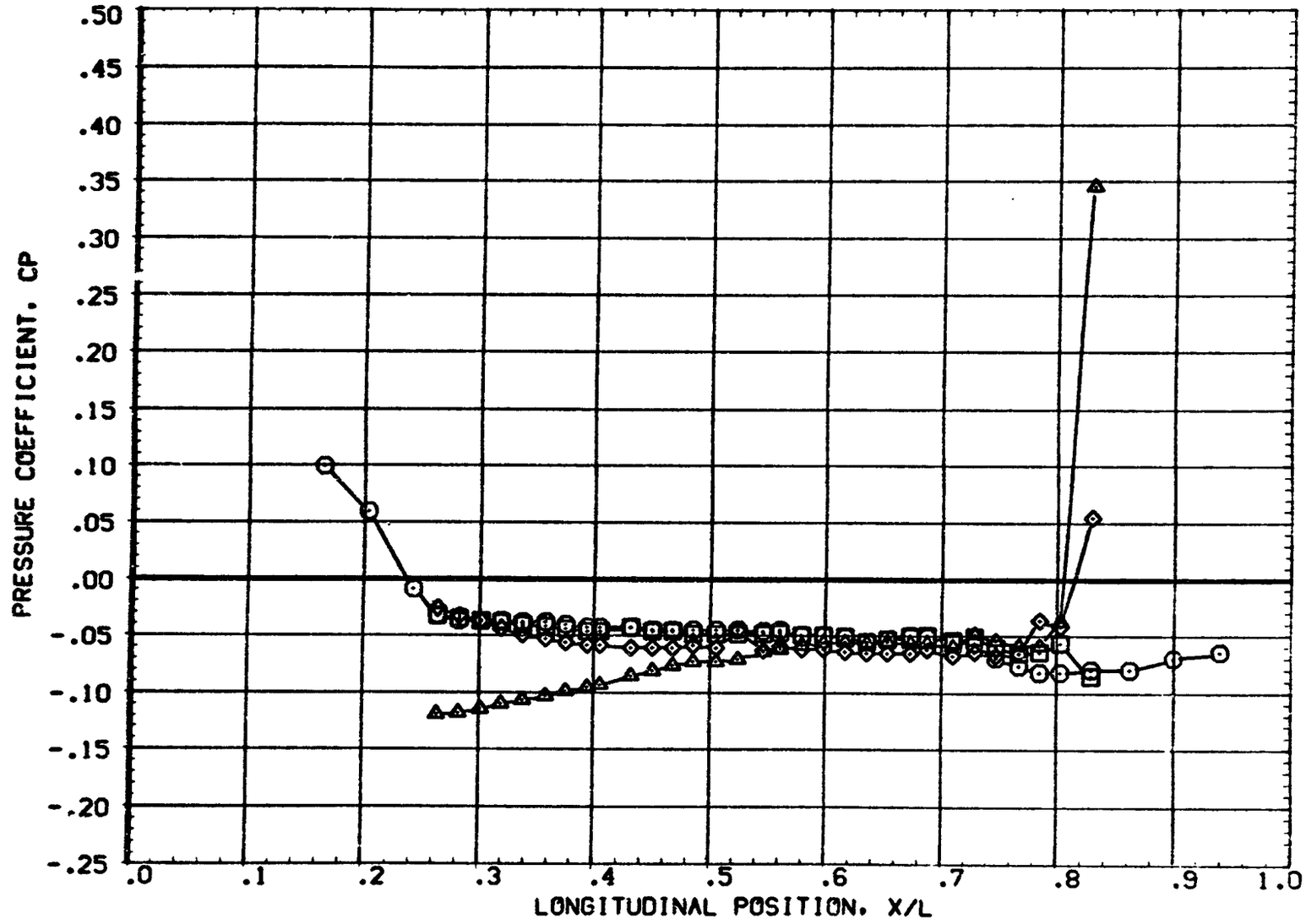
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
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□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.0



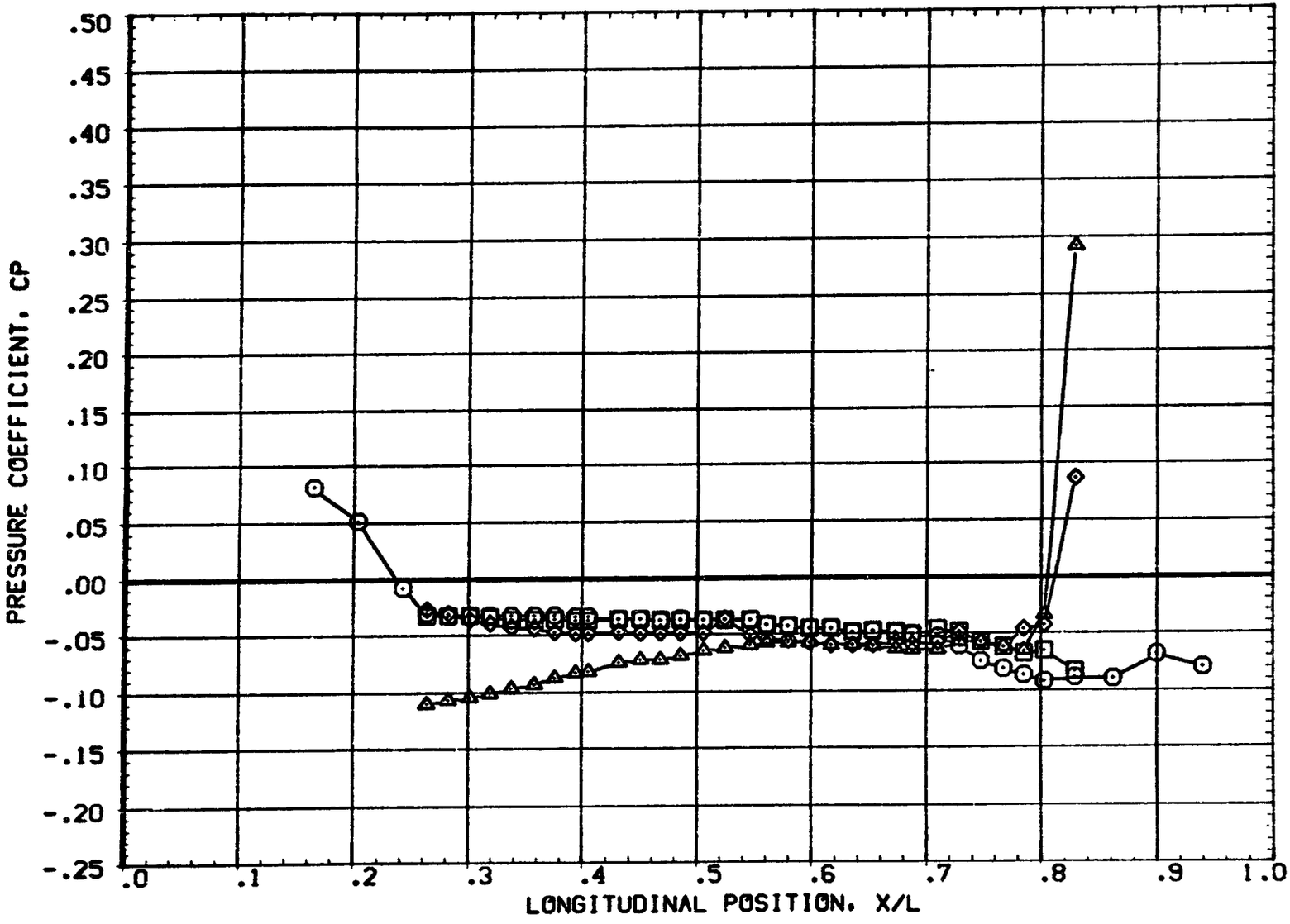
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	16.010	2.950
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



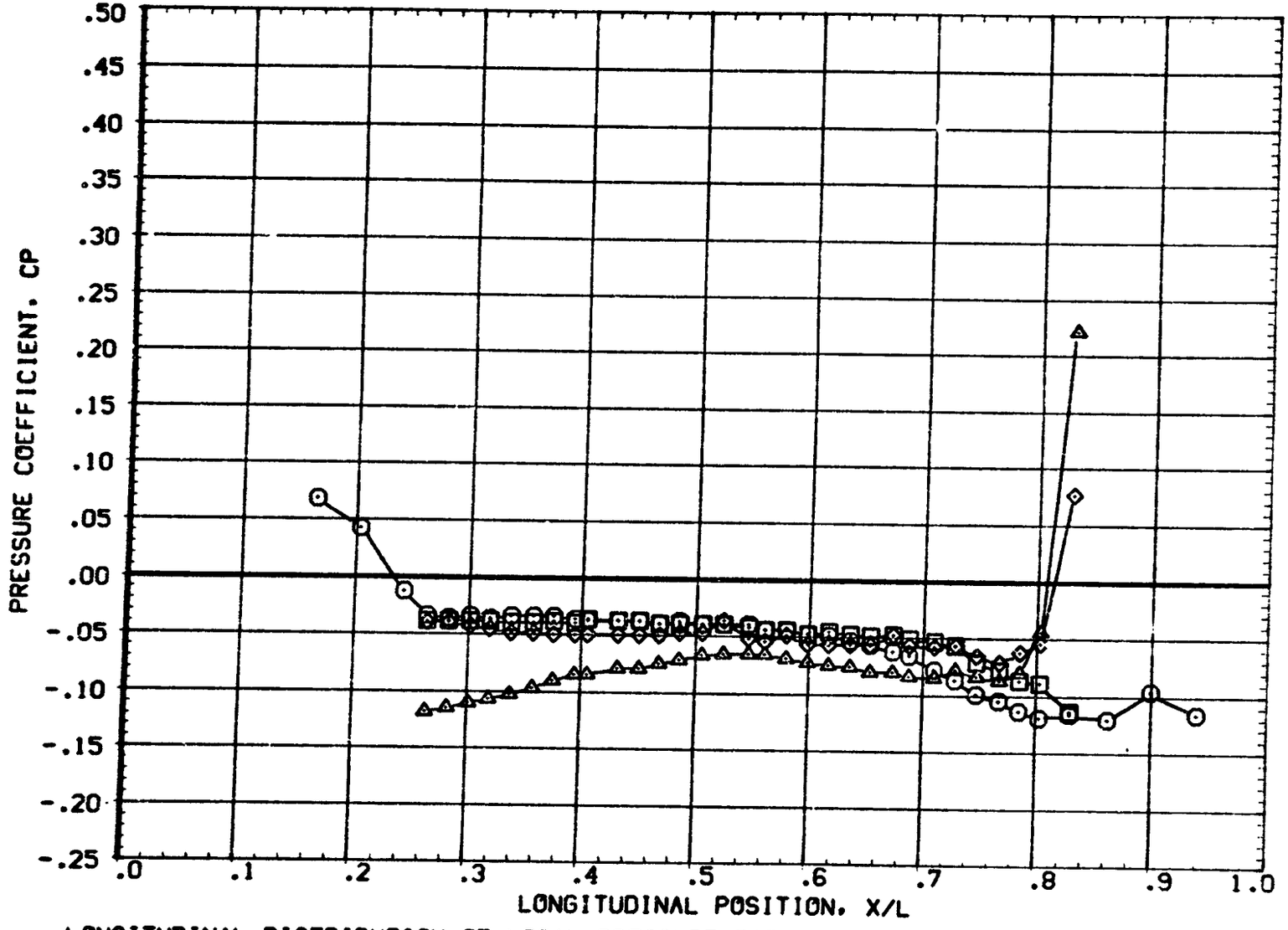
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	18.000	2.950
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



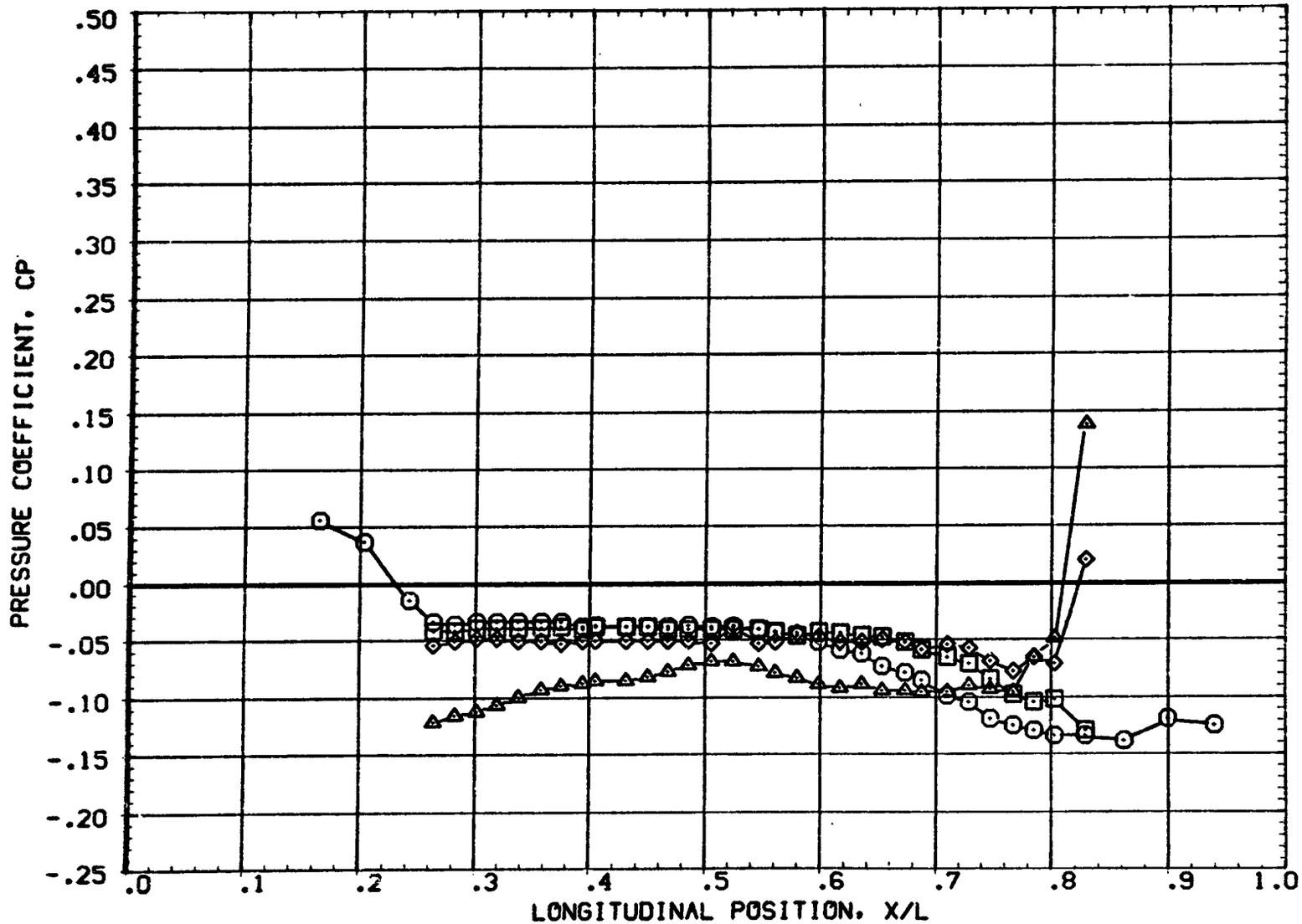
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	20.000	2.950
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

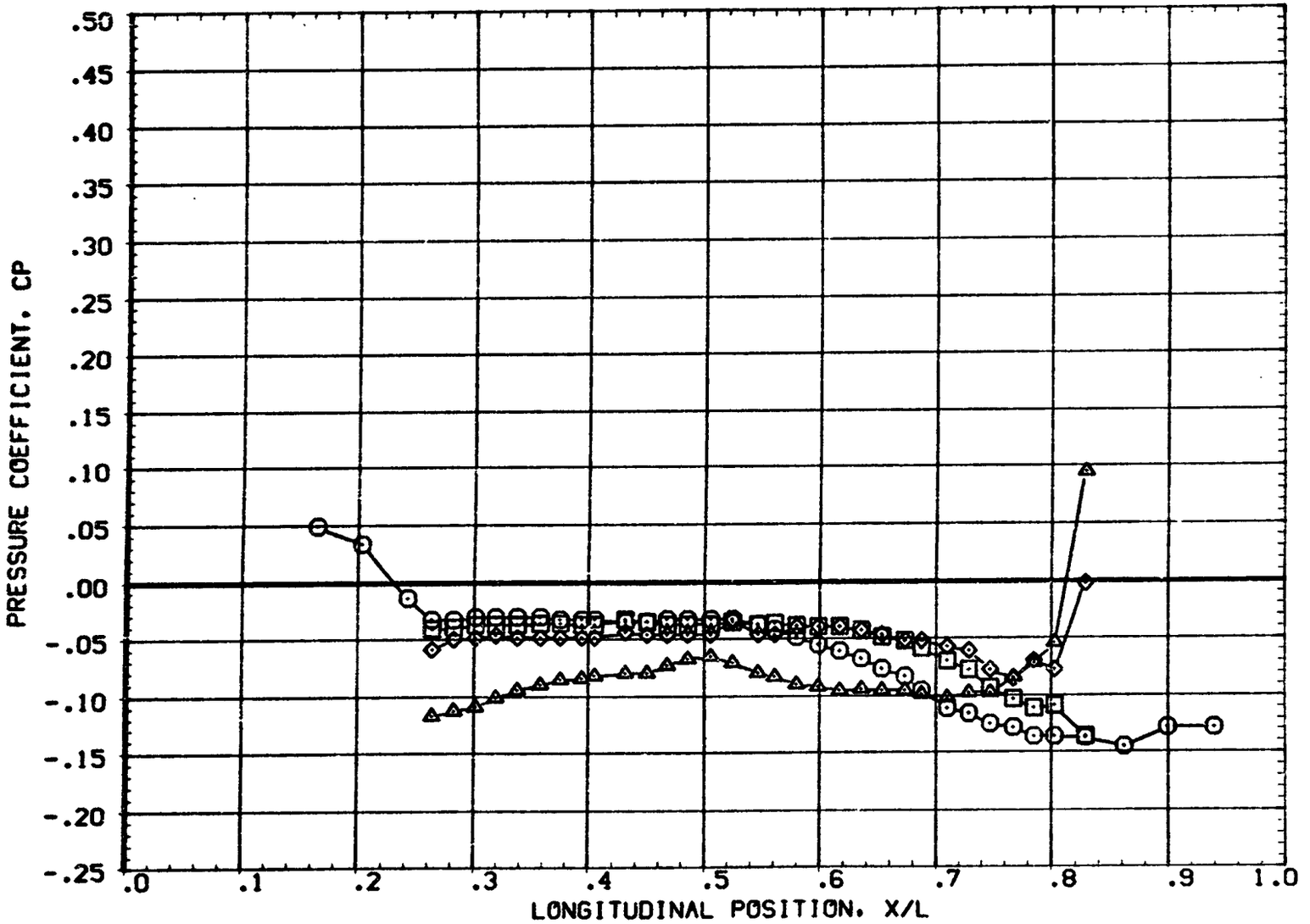


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	20.950	2.950
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

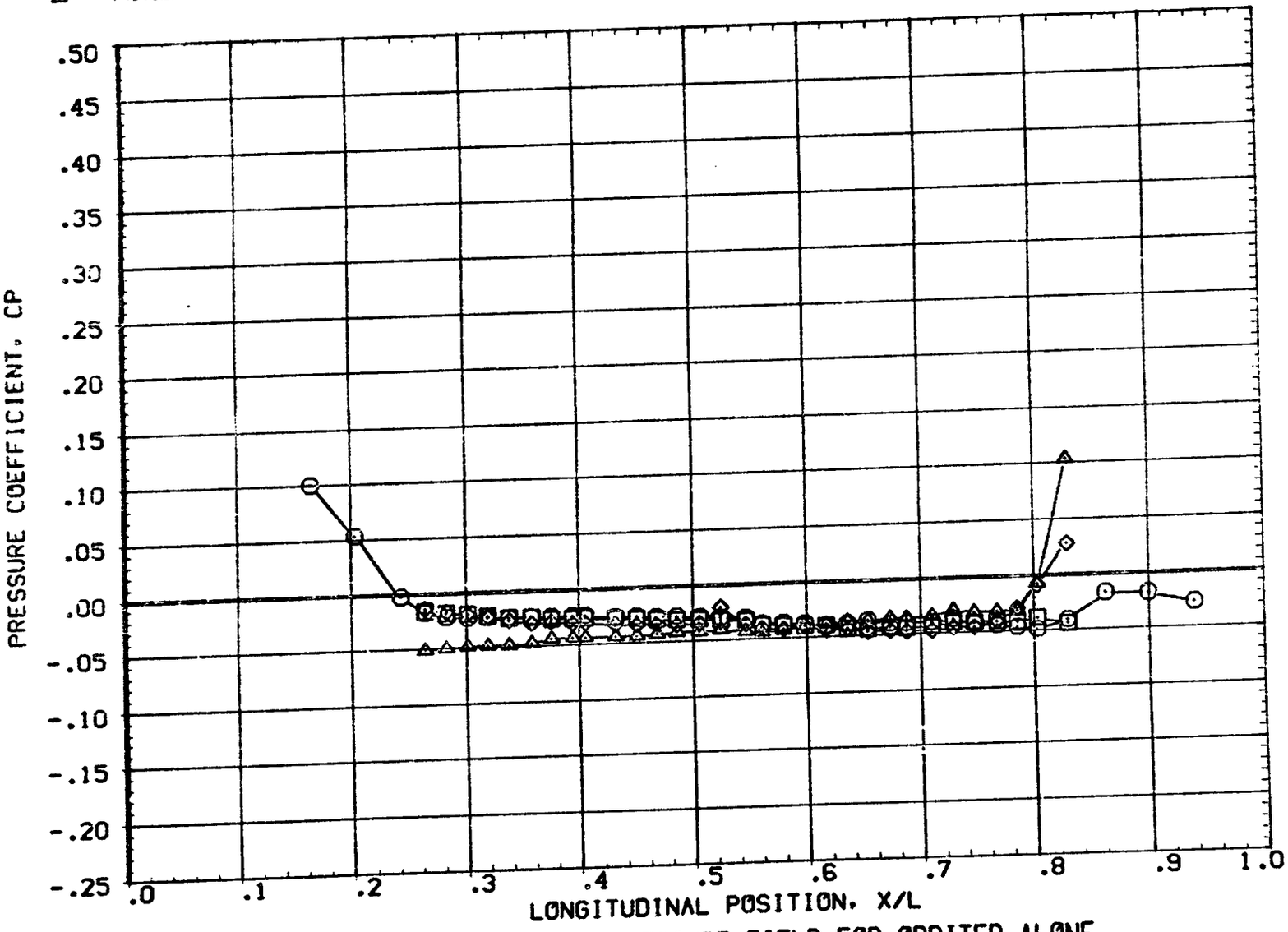


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

0A64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	[illegible].000	7.990	4.000
□	100.000		
◇	[illegible].000		
△	180.000		

PARAMETRIC VALUES
BETA .000 ELEVON -15.000



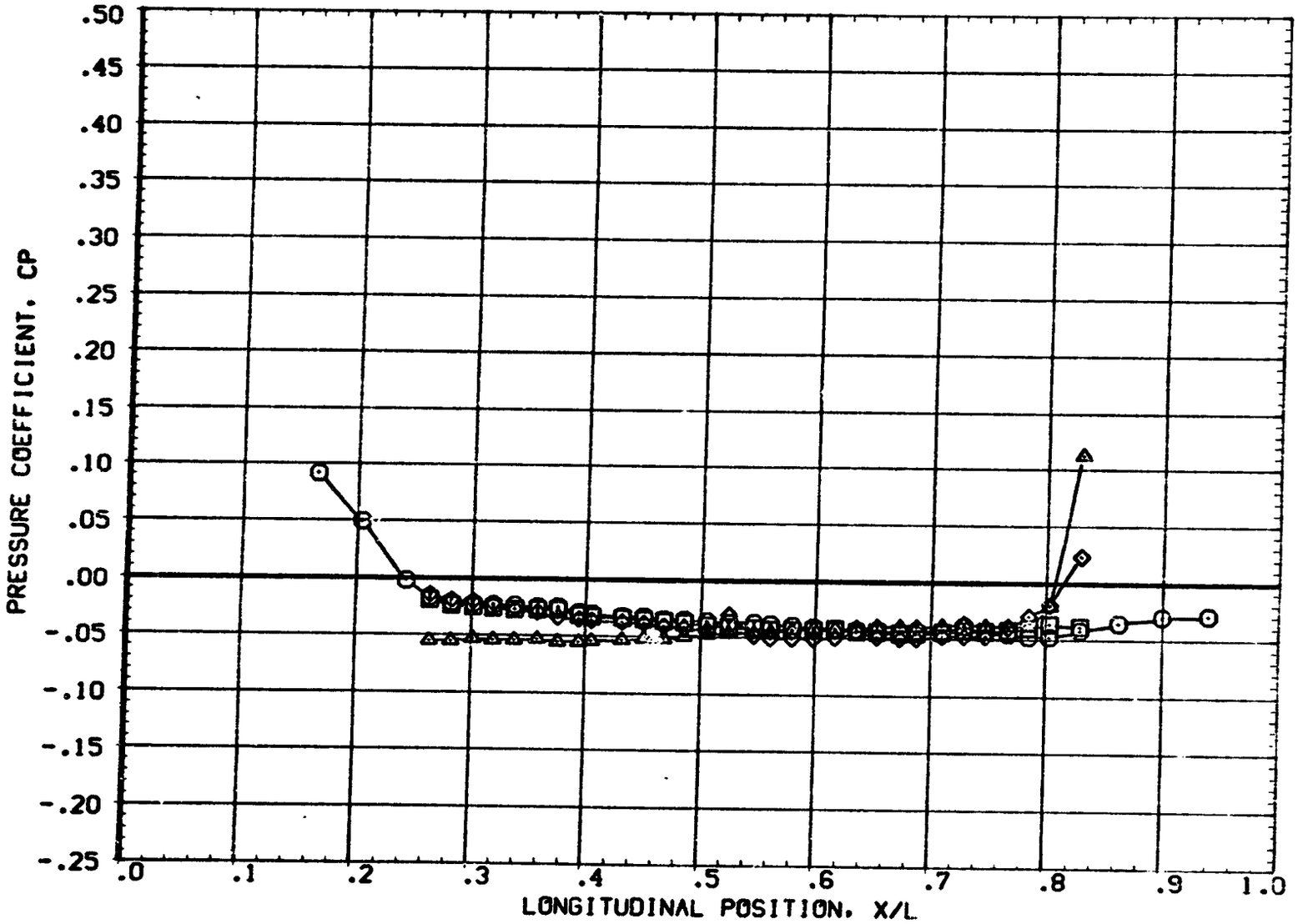
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	10.000	4.000
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



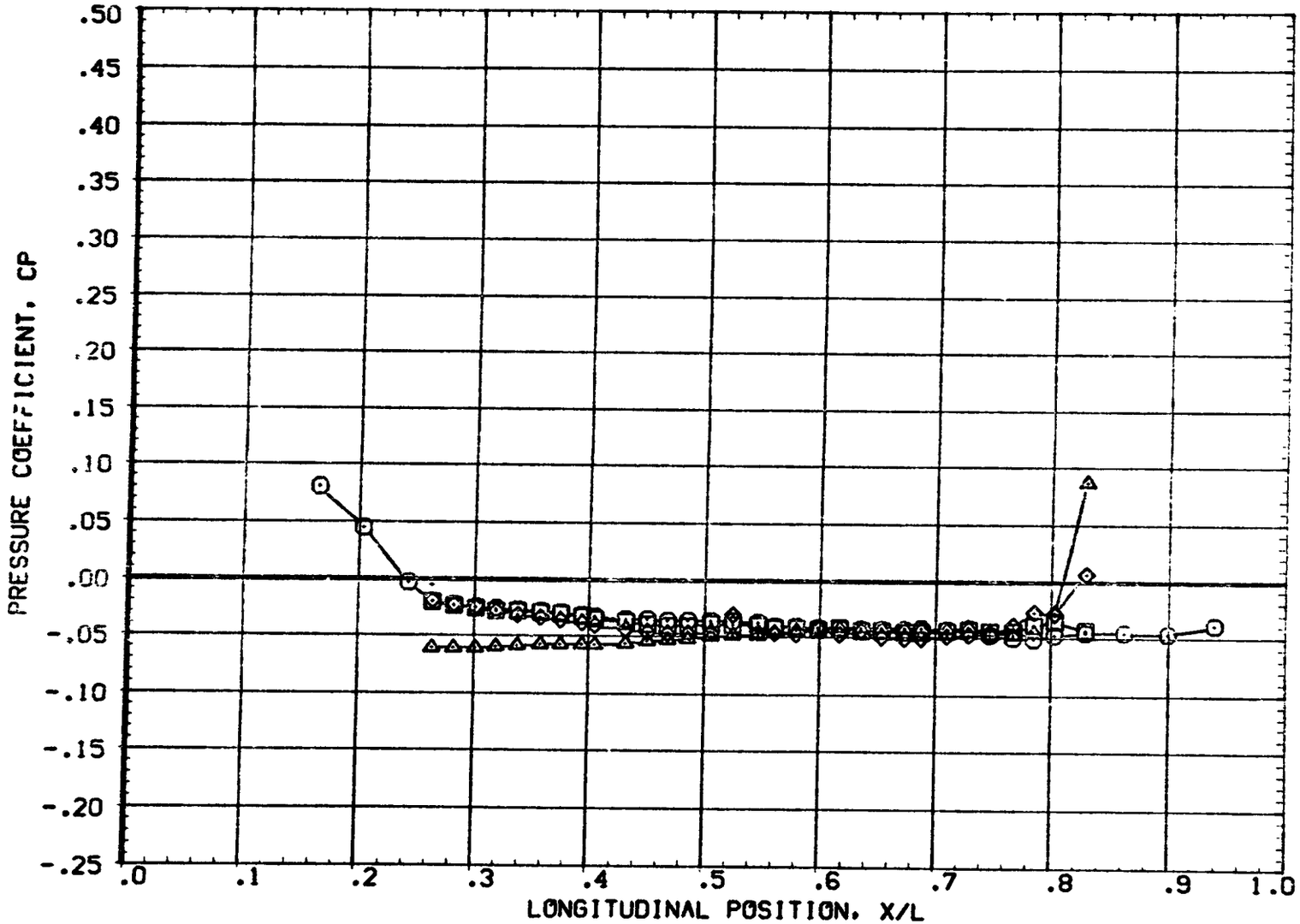
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	12.010	4.000
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

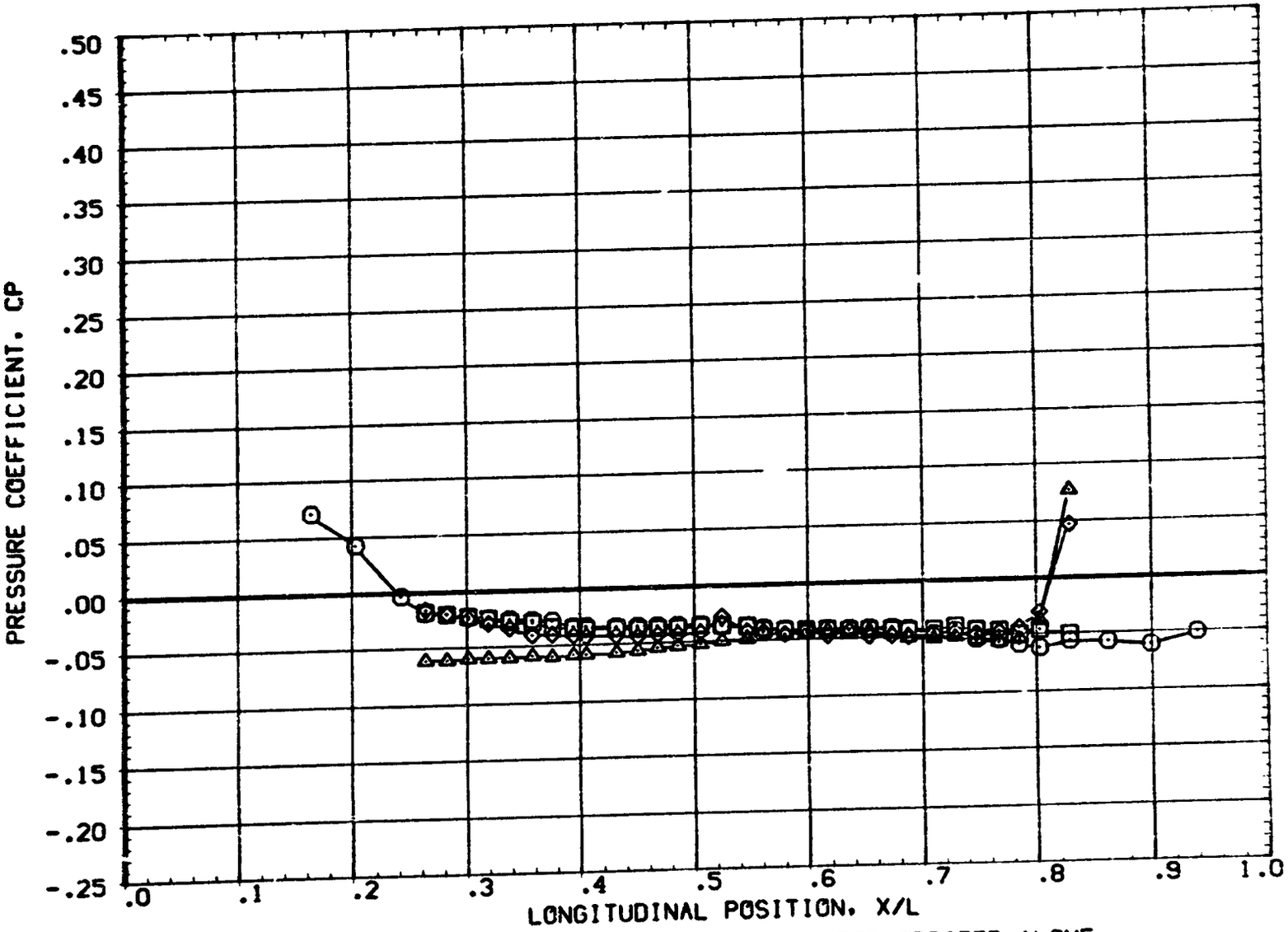


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	14.000	4.000
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES
BETA .000 ELEVON -15.000



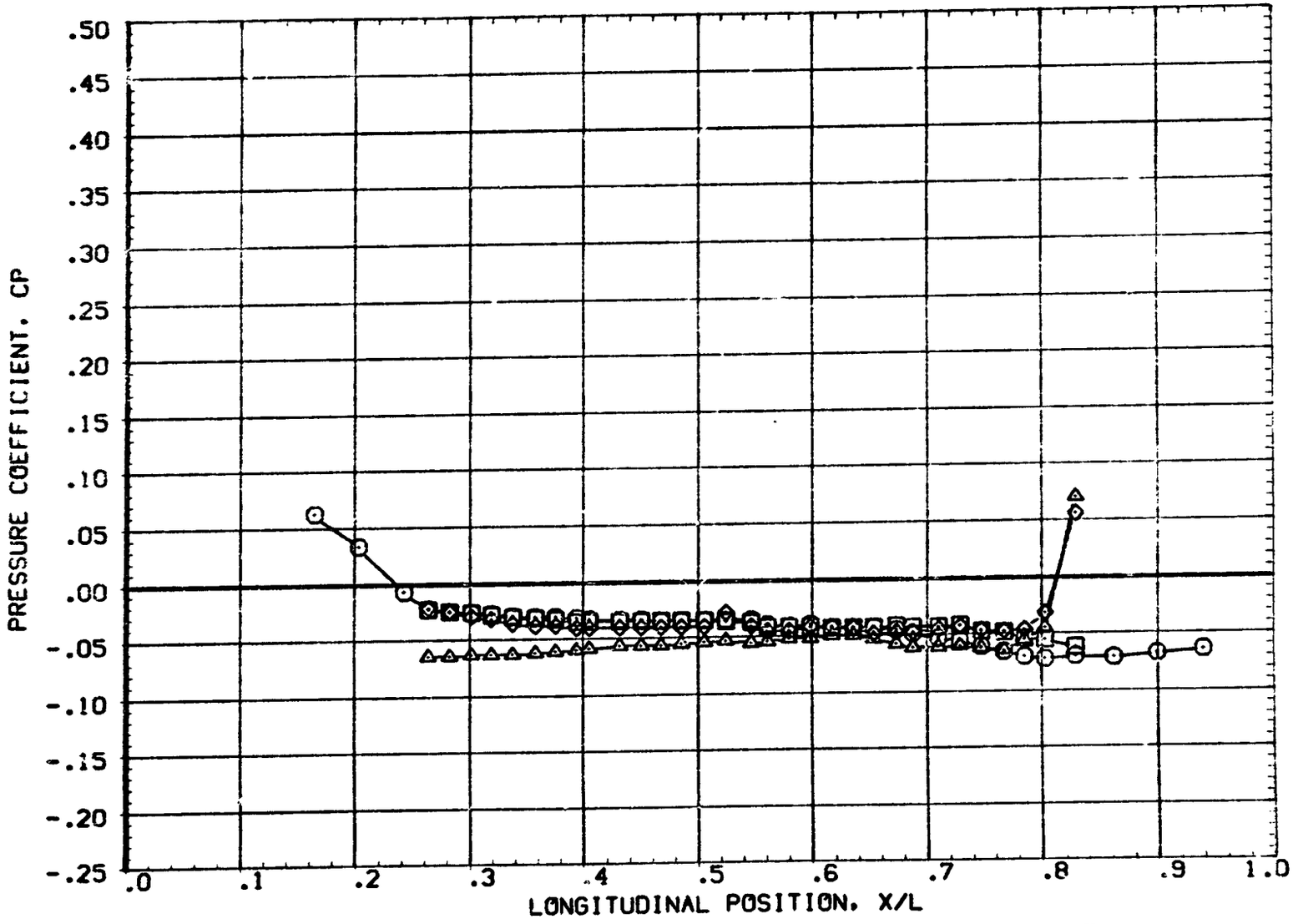
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

PARAMETRIC VALUES

BETA .000 ELEVON -15.00

	PHI	ALPHA	MACH
	90.000	16.010	4.000
□	130.000		
◇	110.000		
△	180.000		

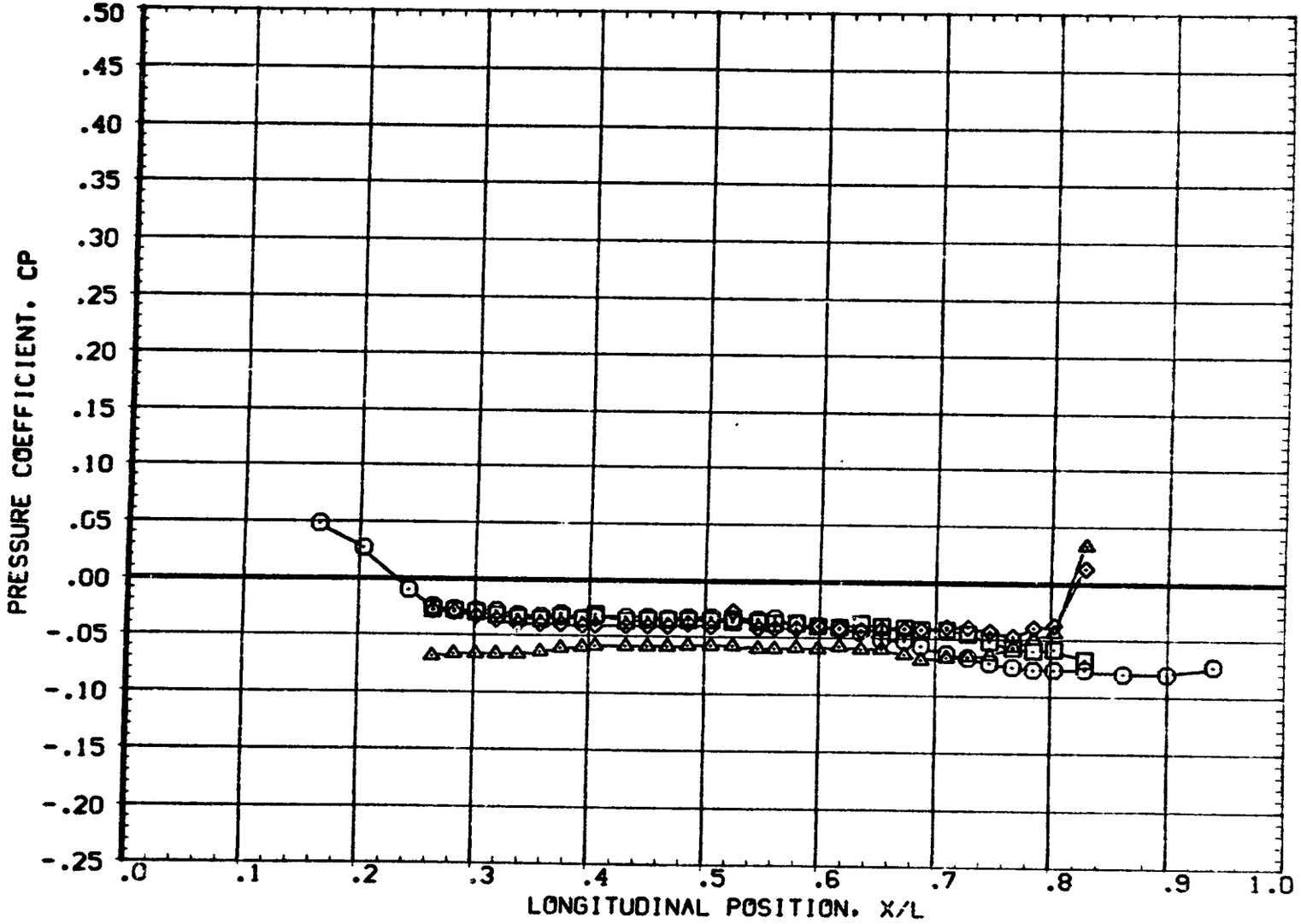


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	18.010	4.000
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES
BETA .000 ELEVON -15.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

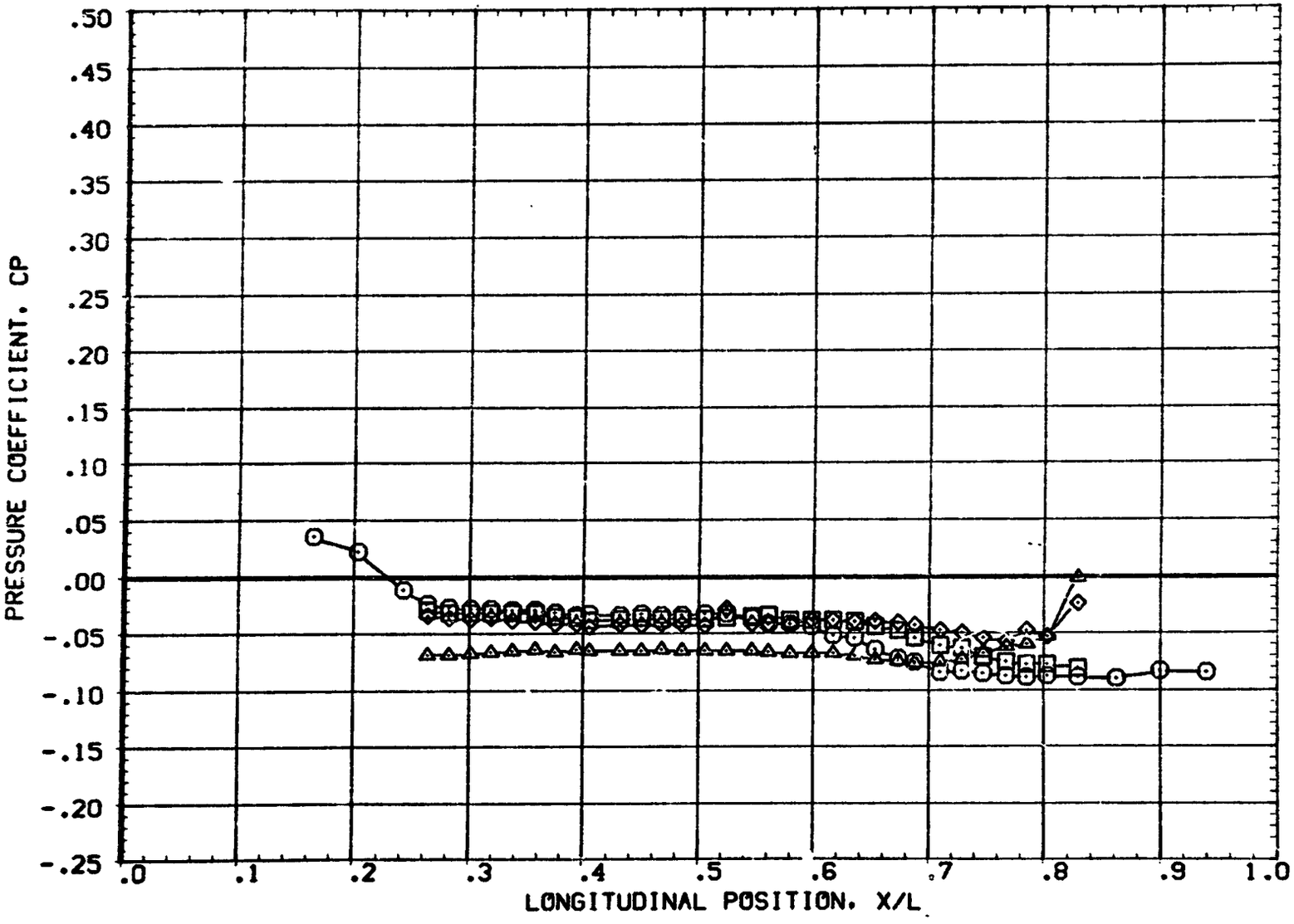


OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
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□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



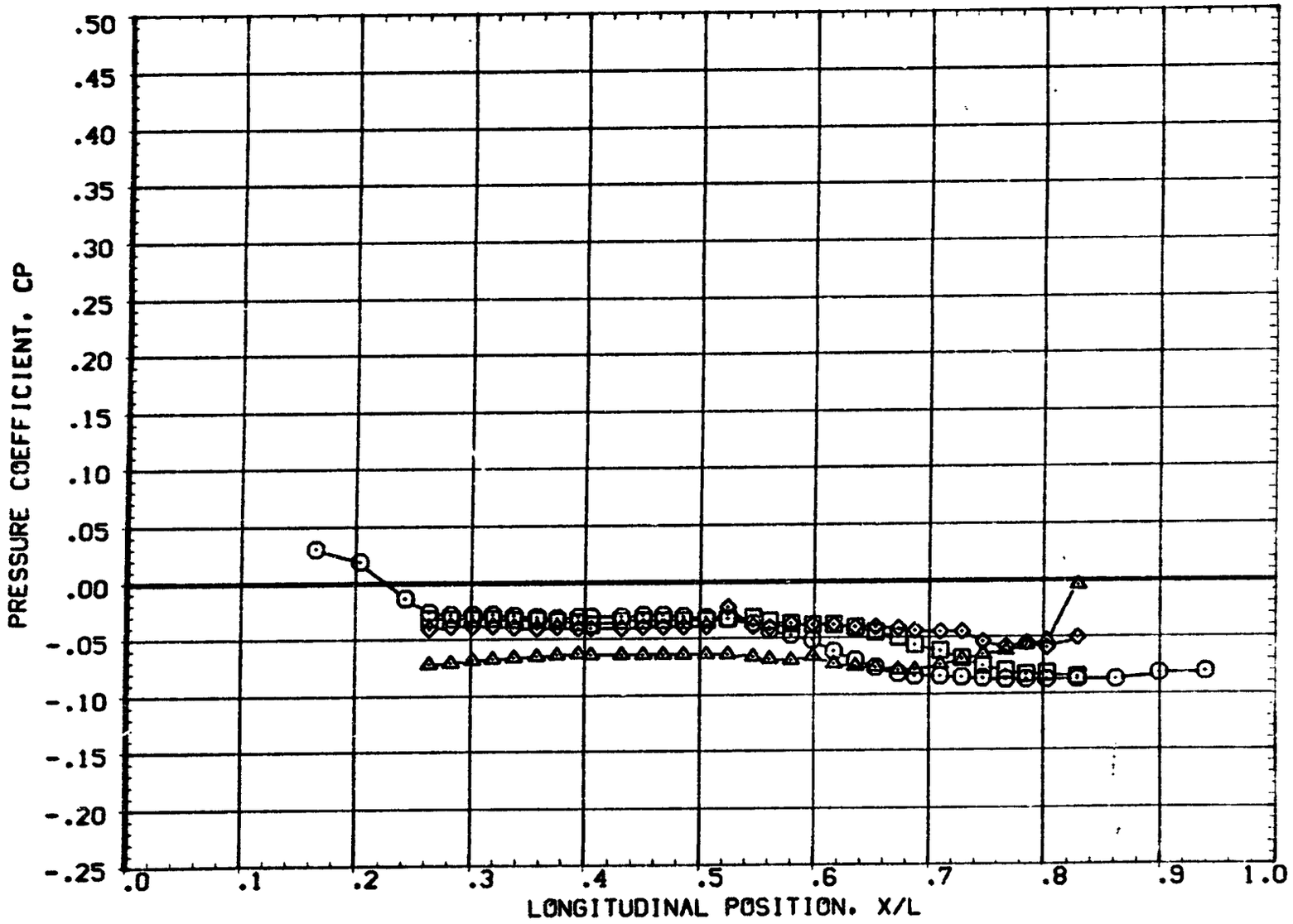
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

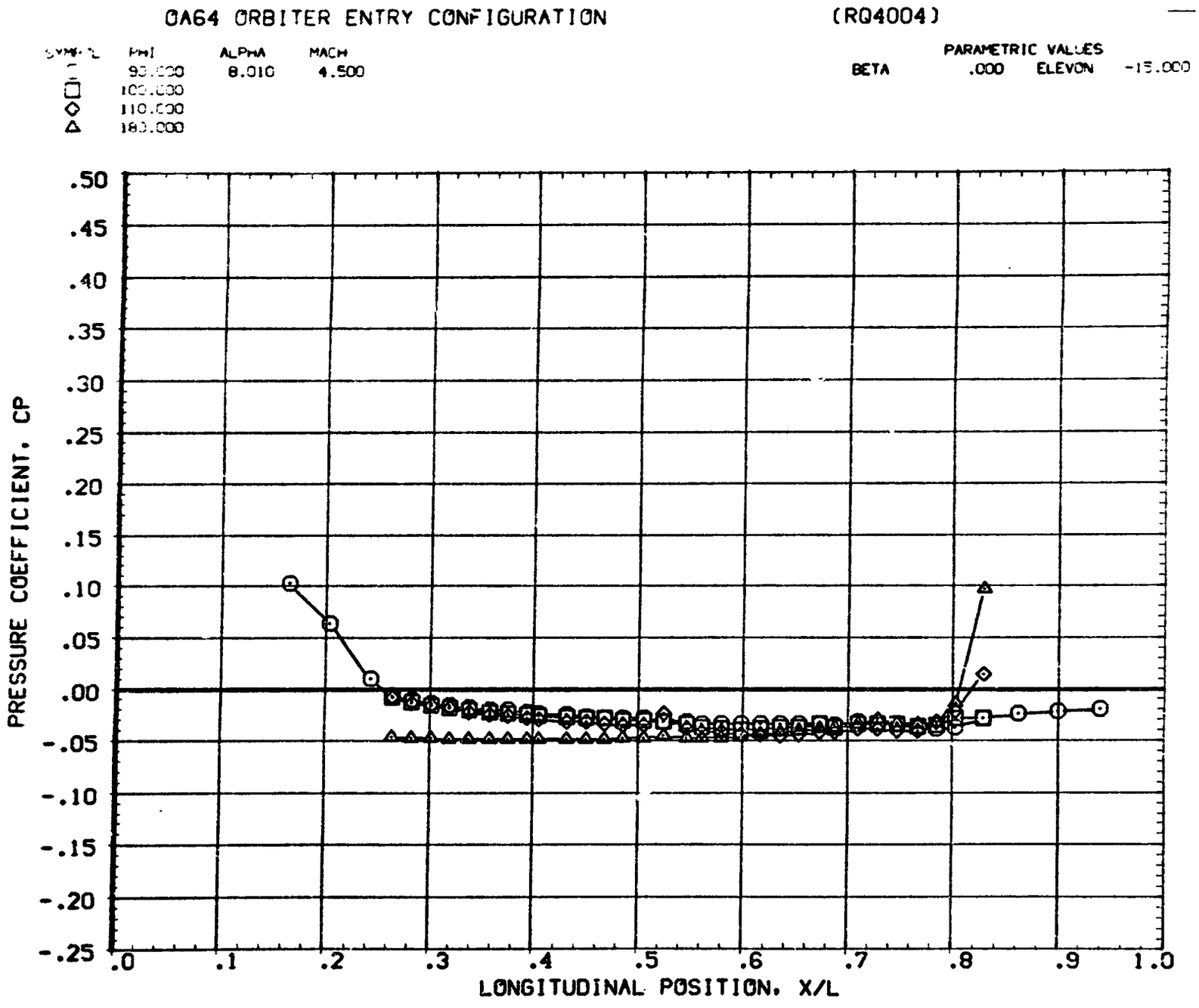
SYMBOL	PHI	ALPHA	MACH
○	90.000	20.970	4.000
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



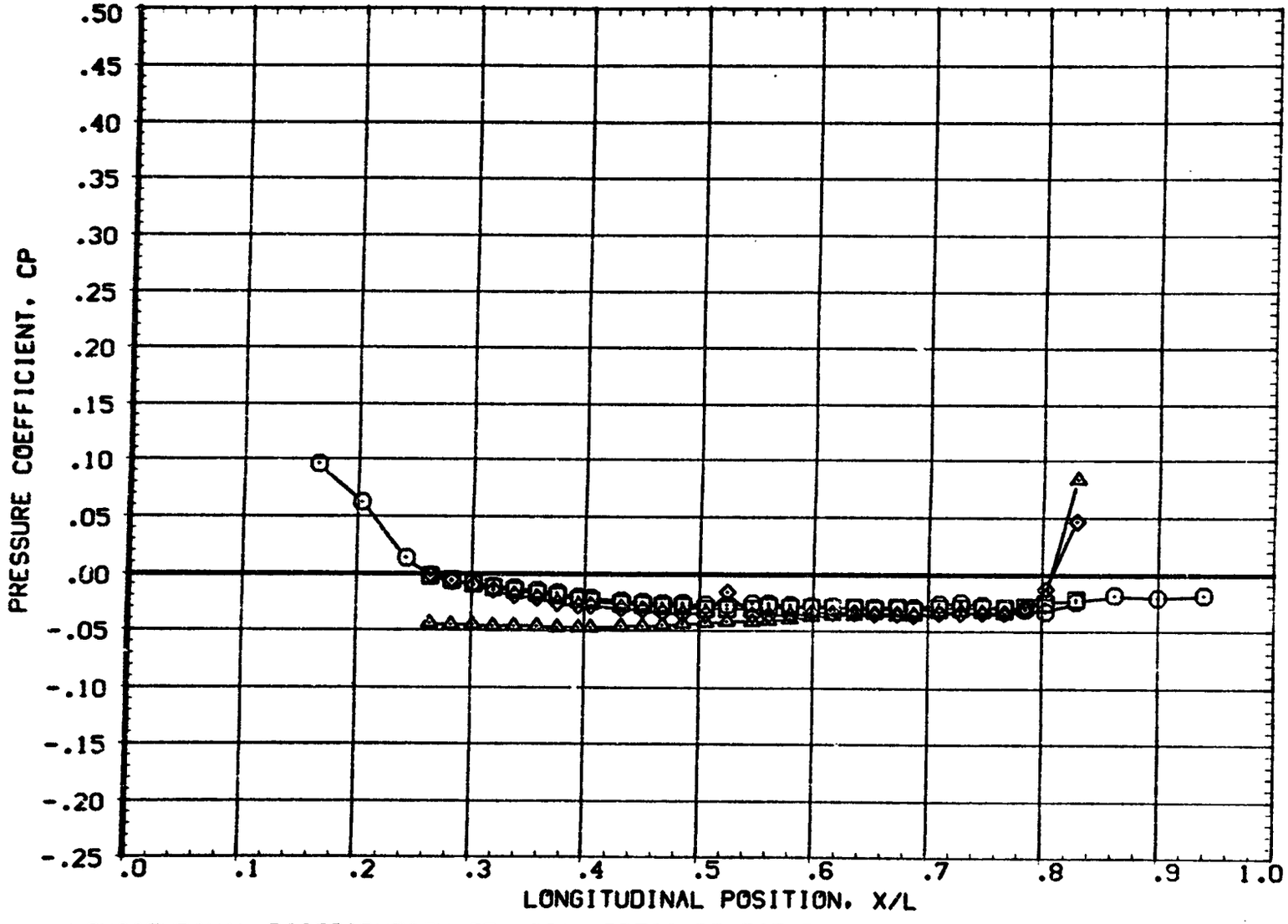
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	10.000	4.500
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

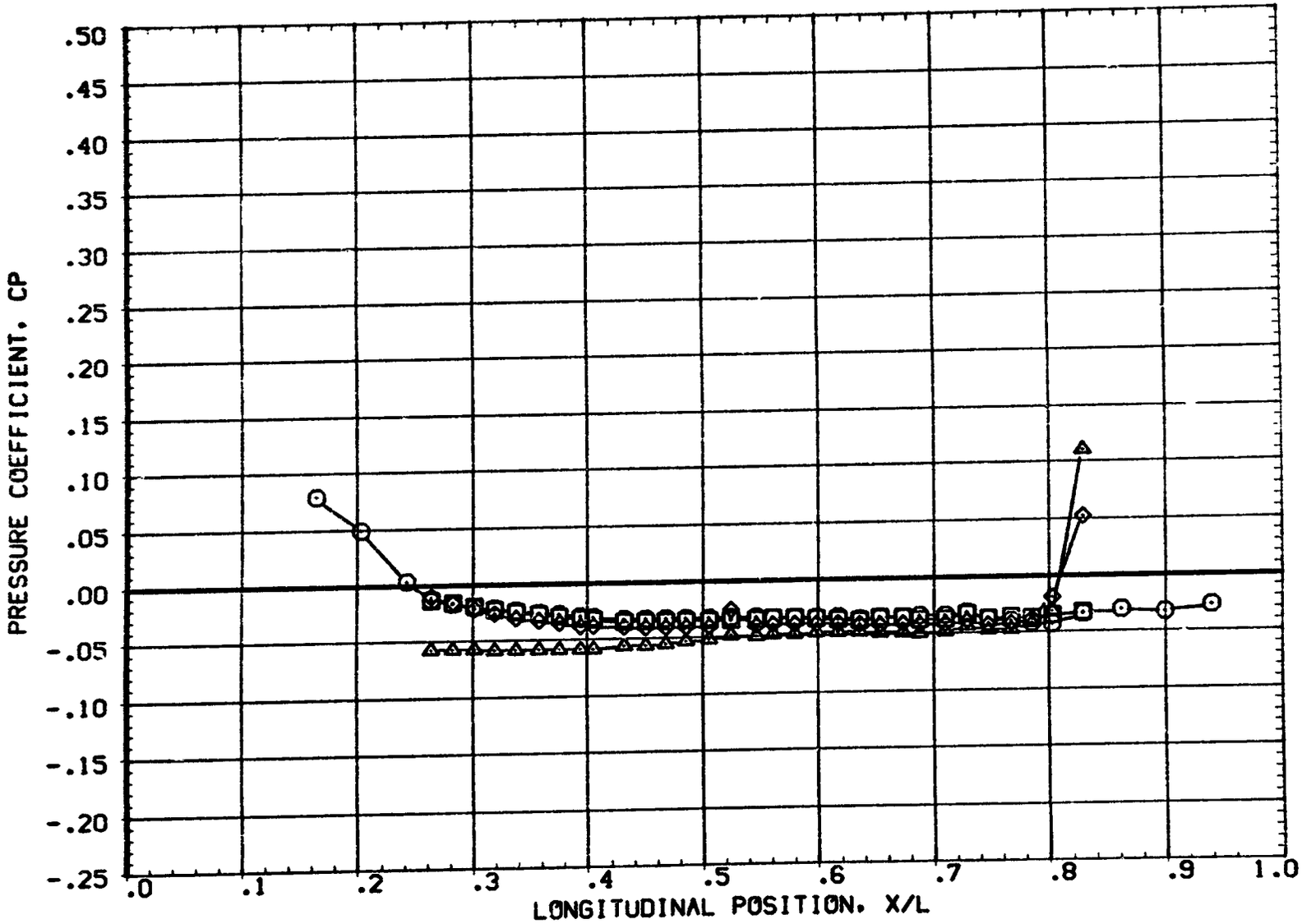


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	12.010	4.500
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES
BETA .000 ELEVON -15.000



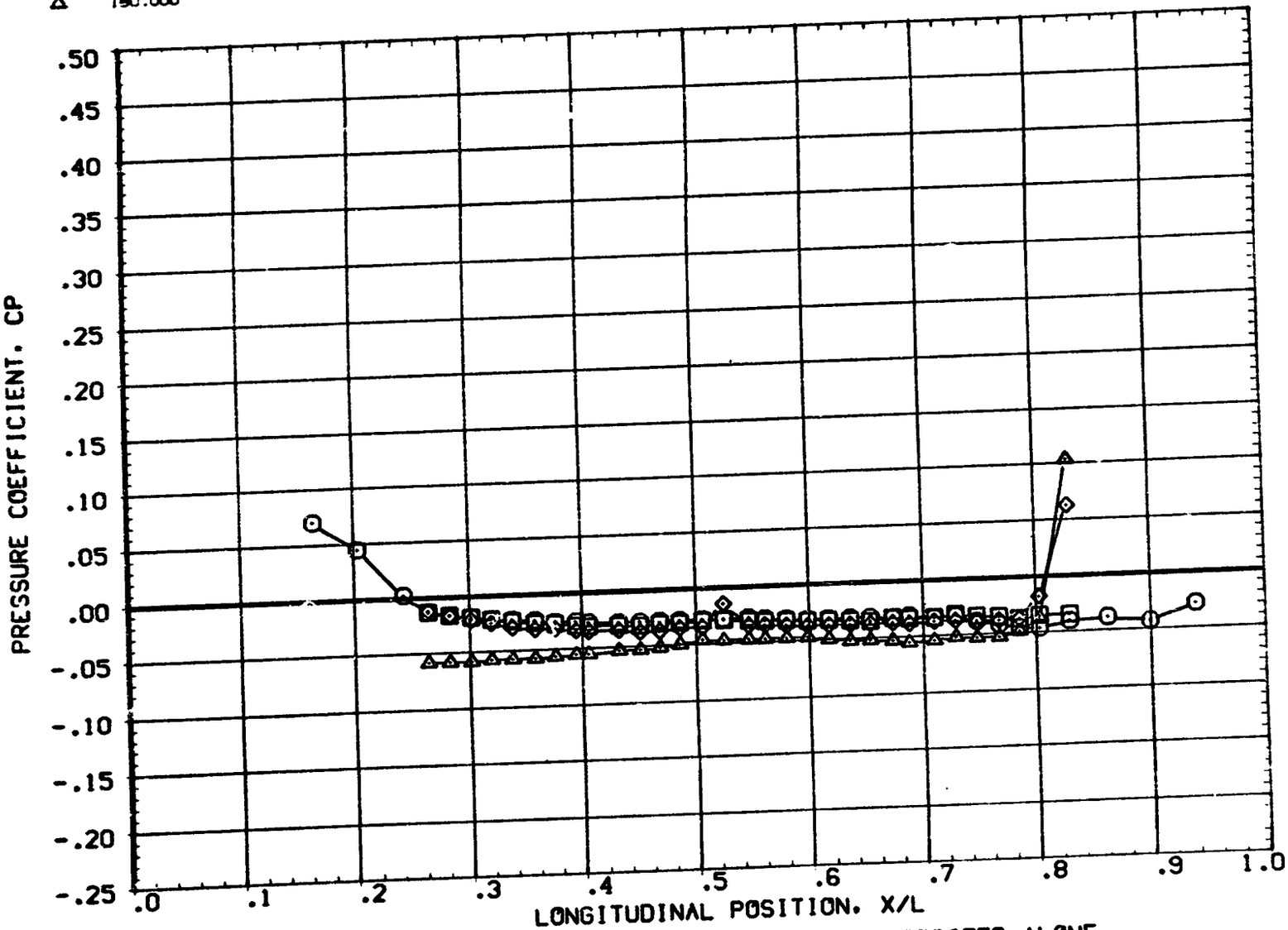
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

SYMBOL	PHI	ALPHA	MACH
	90.000	14.310	4.500
◇	100.000		
△	110.000		
	190.000		



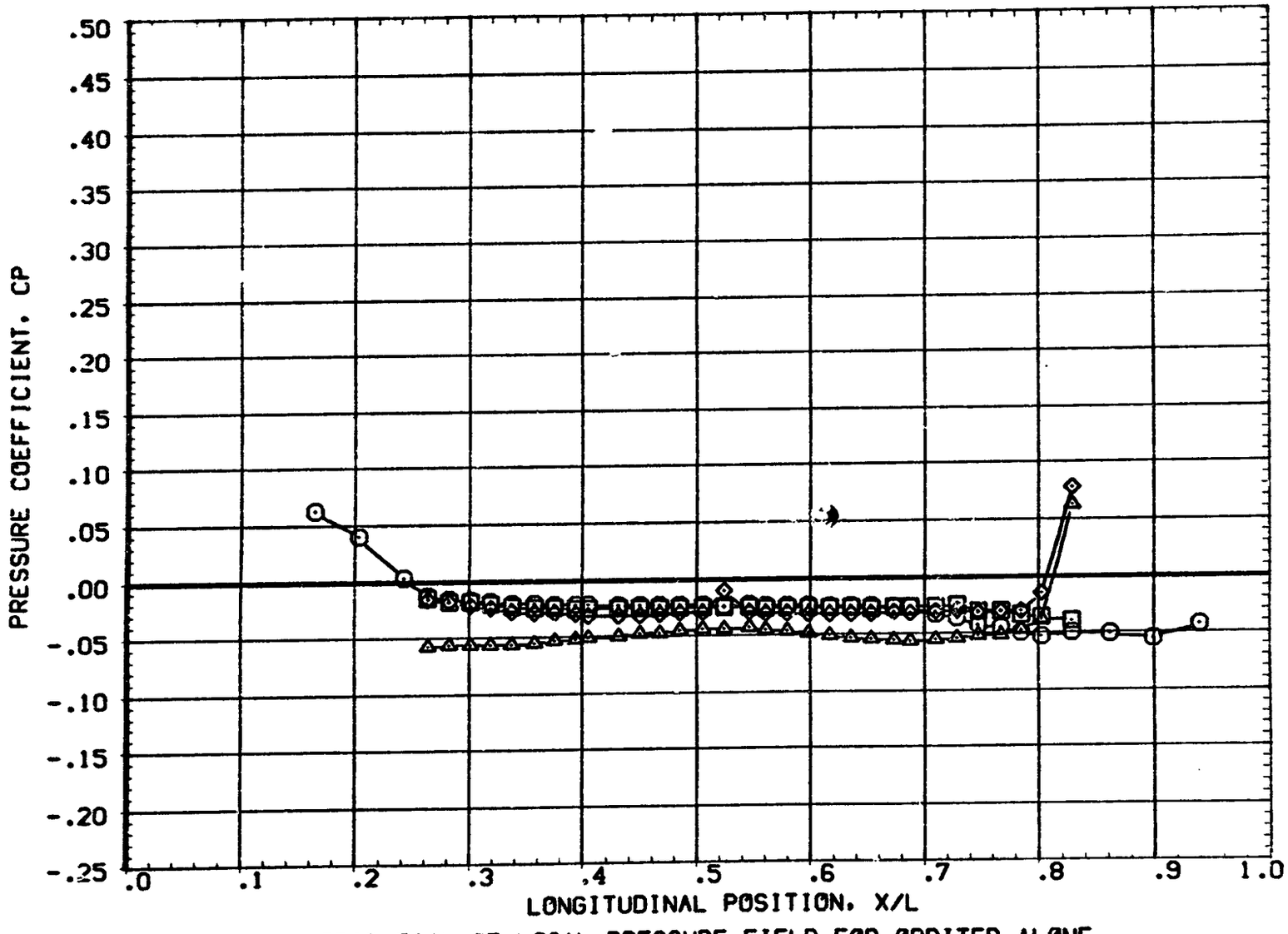
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

0A64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	16.000	4.500
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



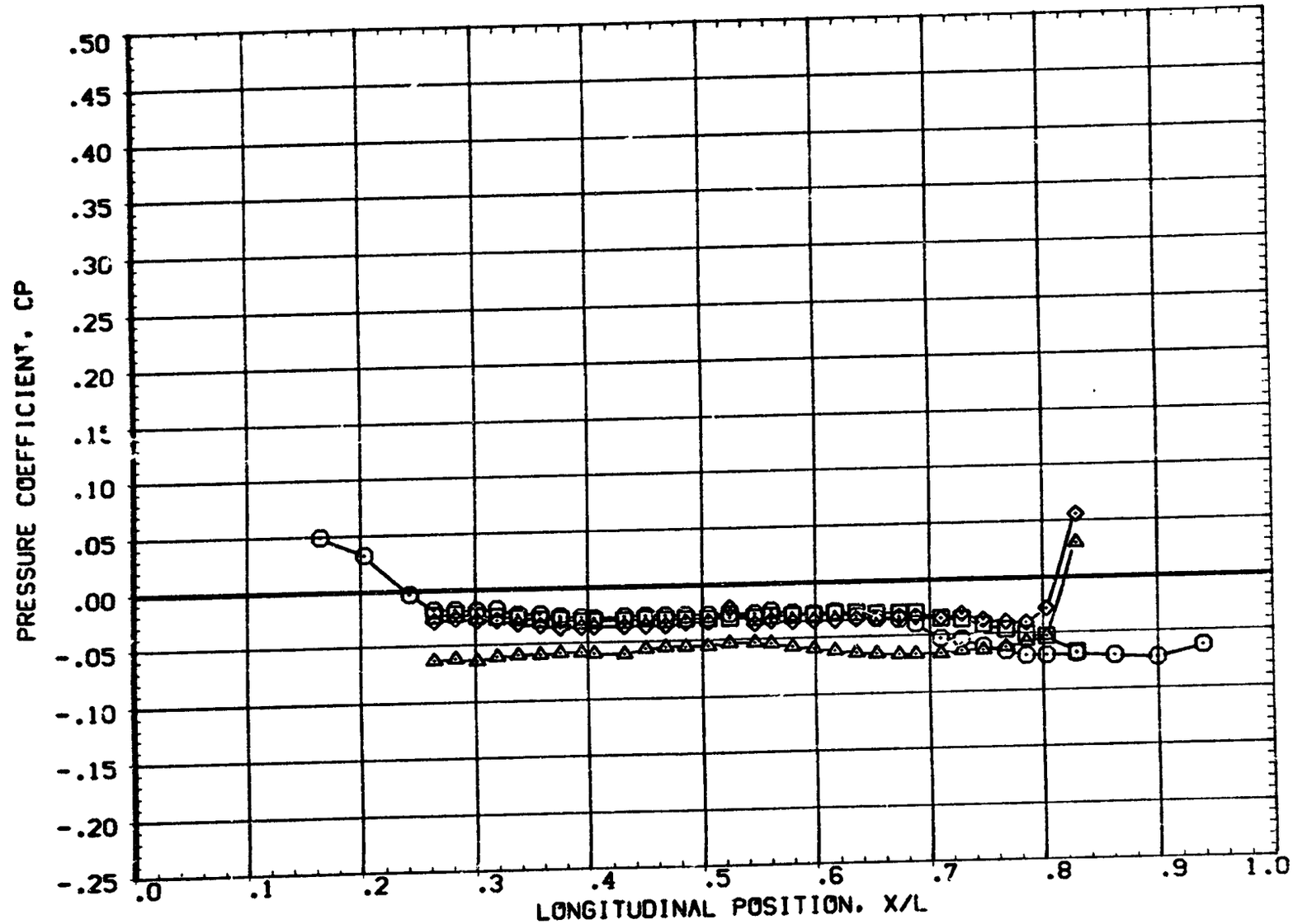
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
	90.000	18.000	4.500
	100.000		
	110.000		
	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



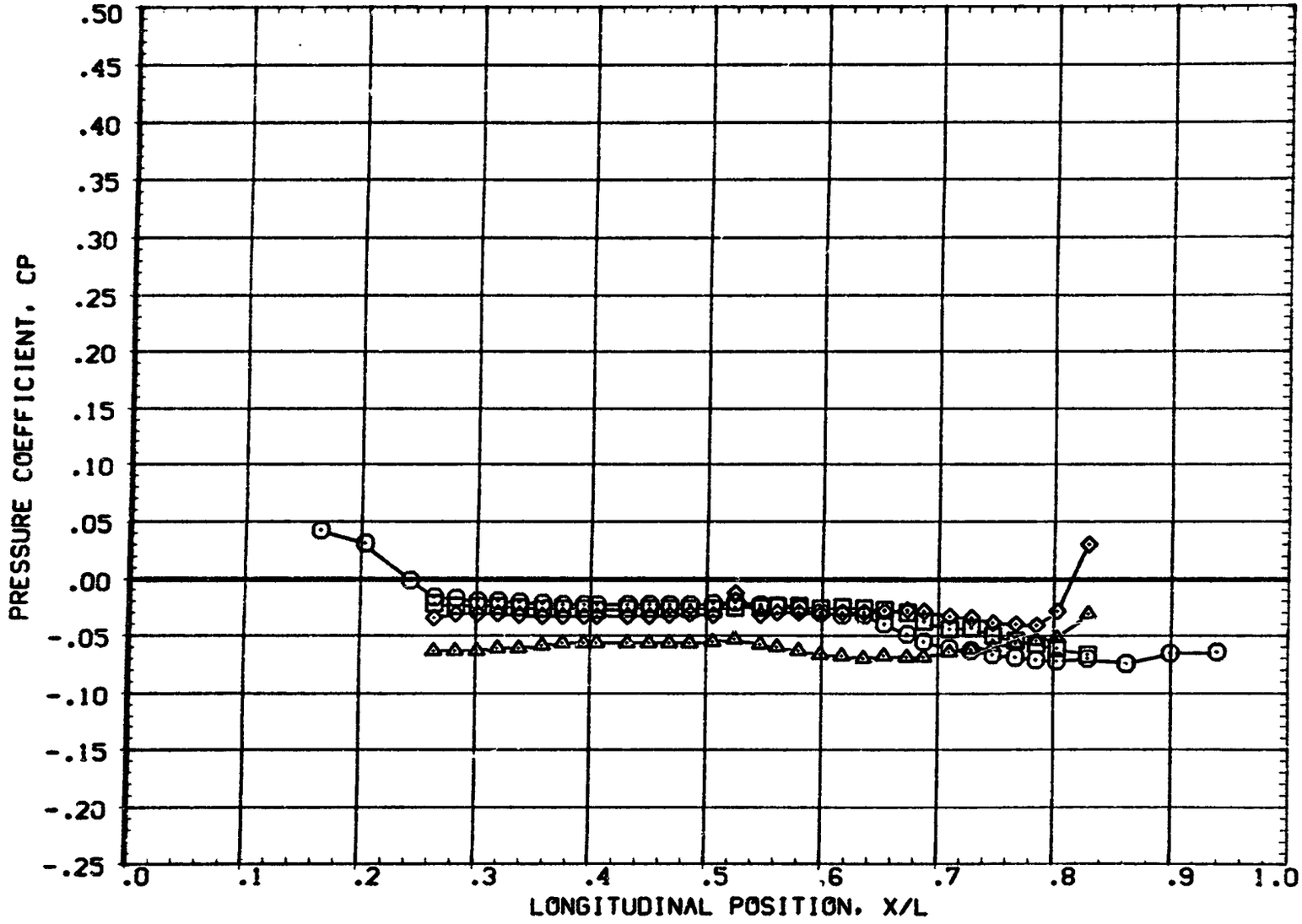
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	19.990	4.500
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



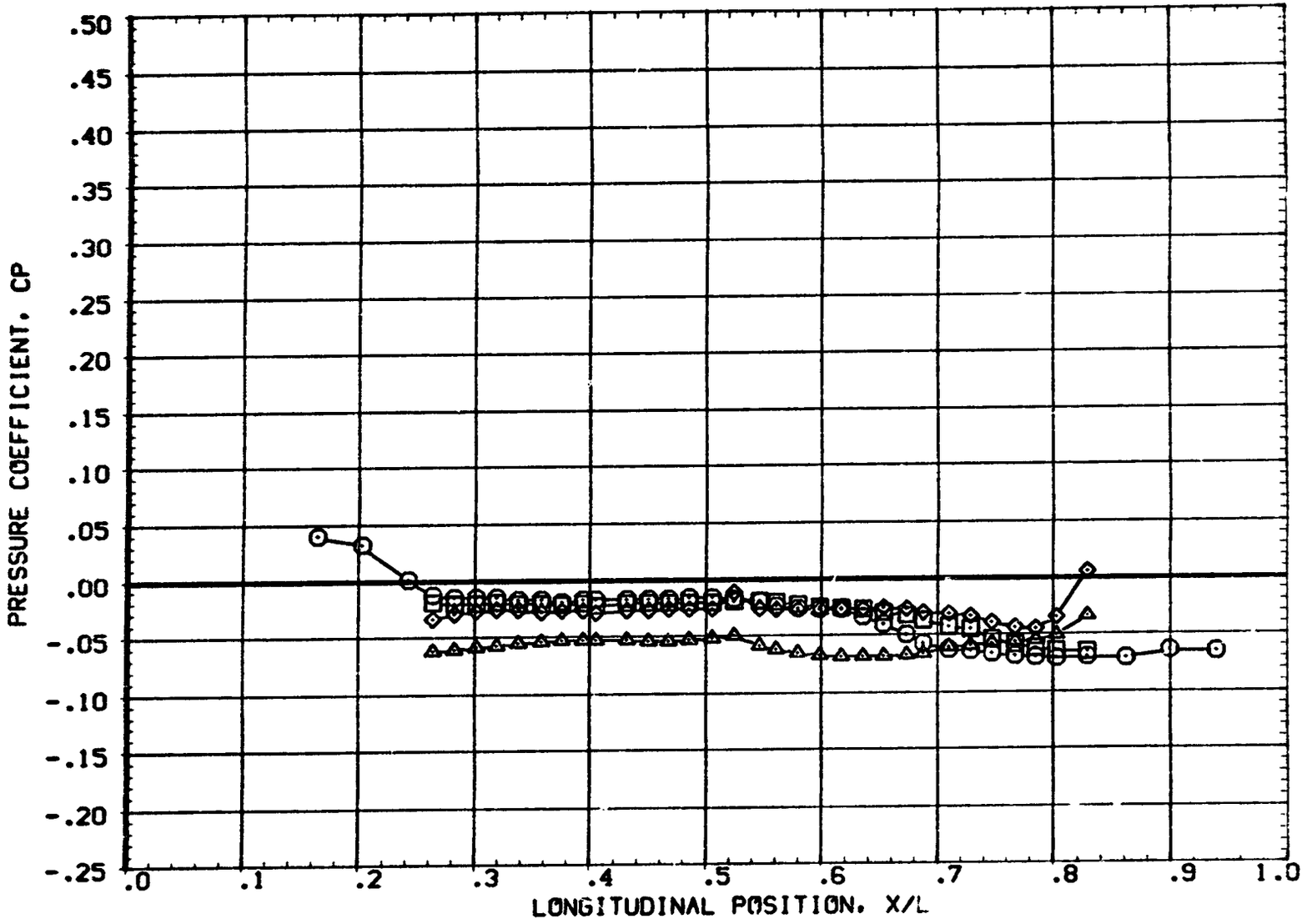
LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	PHI	ALPHA	MACH
○	90.000	20.960	4.500
□	100.000		
◇	110.000		
△	180.000		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

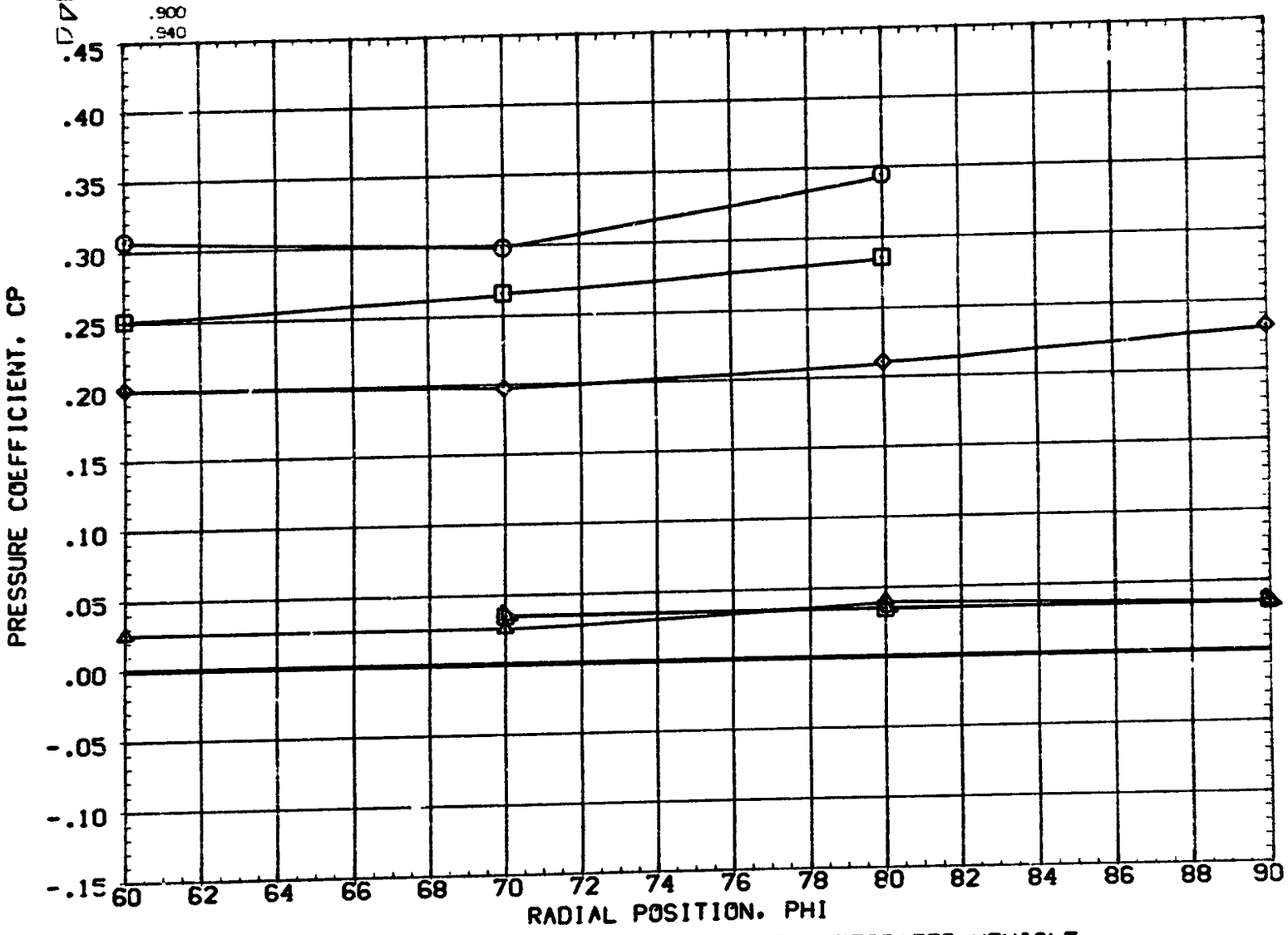


LONGITUDINAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

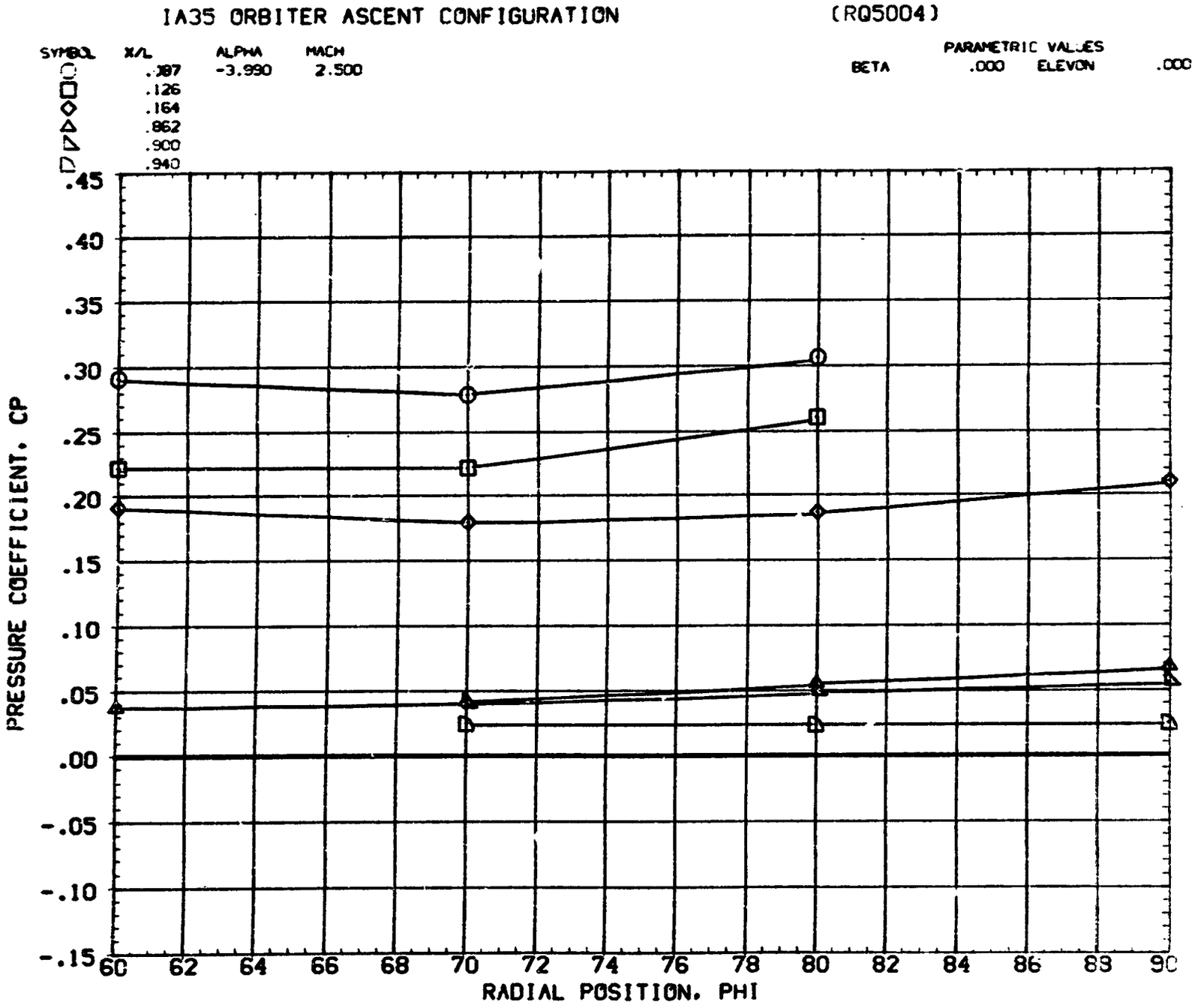
IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

PARAMETRIC VALUES

SYMBOL	X/L	ALPHA	MACH	BETA	.000	ELEVON	.000
	.087	-6.010	2.500				
	.126						
	.164						
	.862						
	.900						
	.940						



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



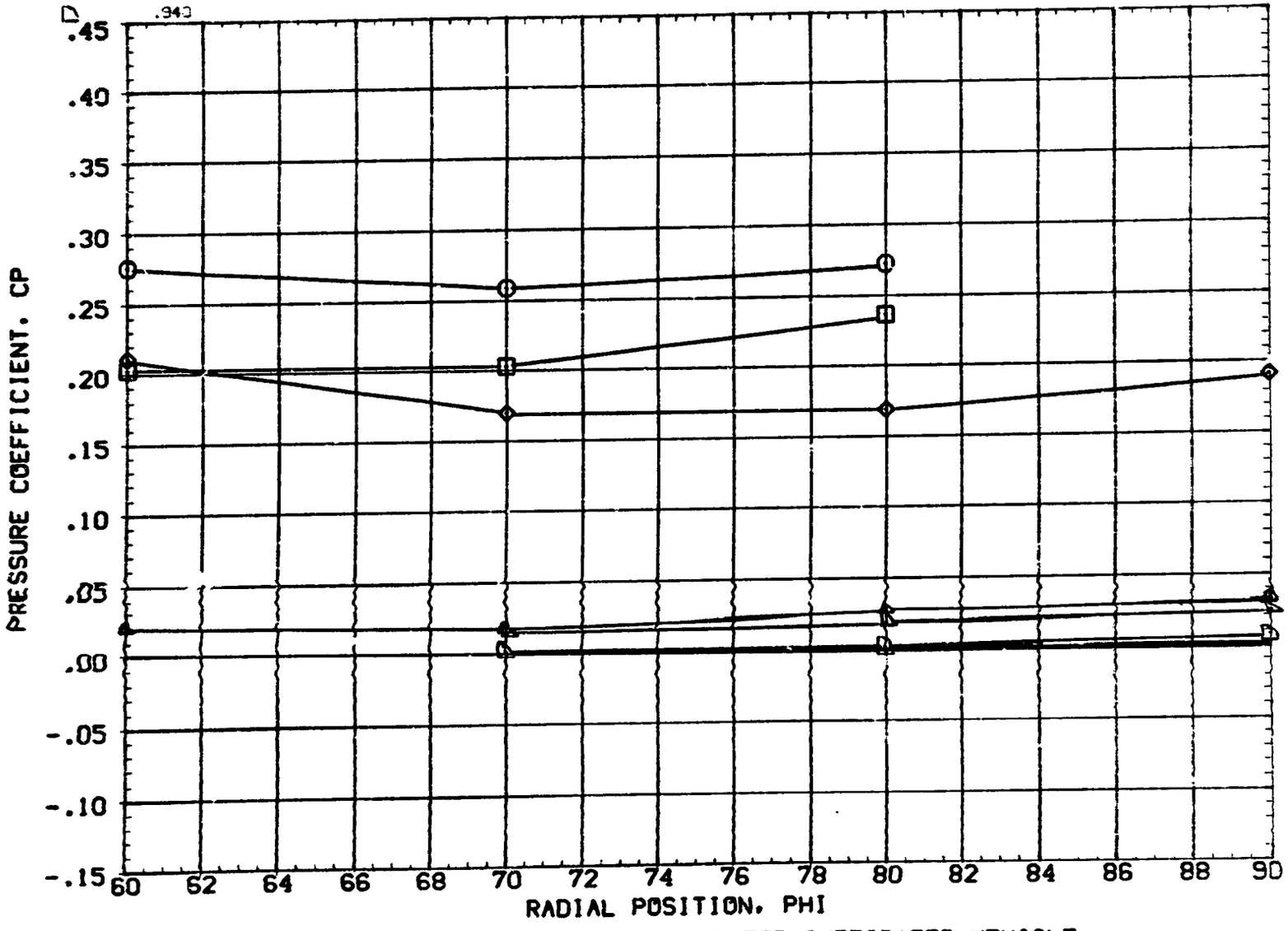
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

PARAMETRIC VALUES

BETA .000 ELEVON .000

SYMBOL	X/L	ALPHA	MACH
	.087	-2.000	2.5
	.126		
	.164		
	.862		
	.900		
	.940		



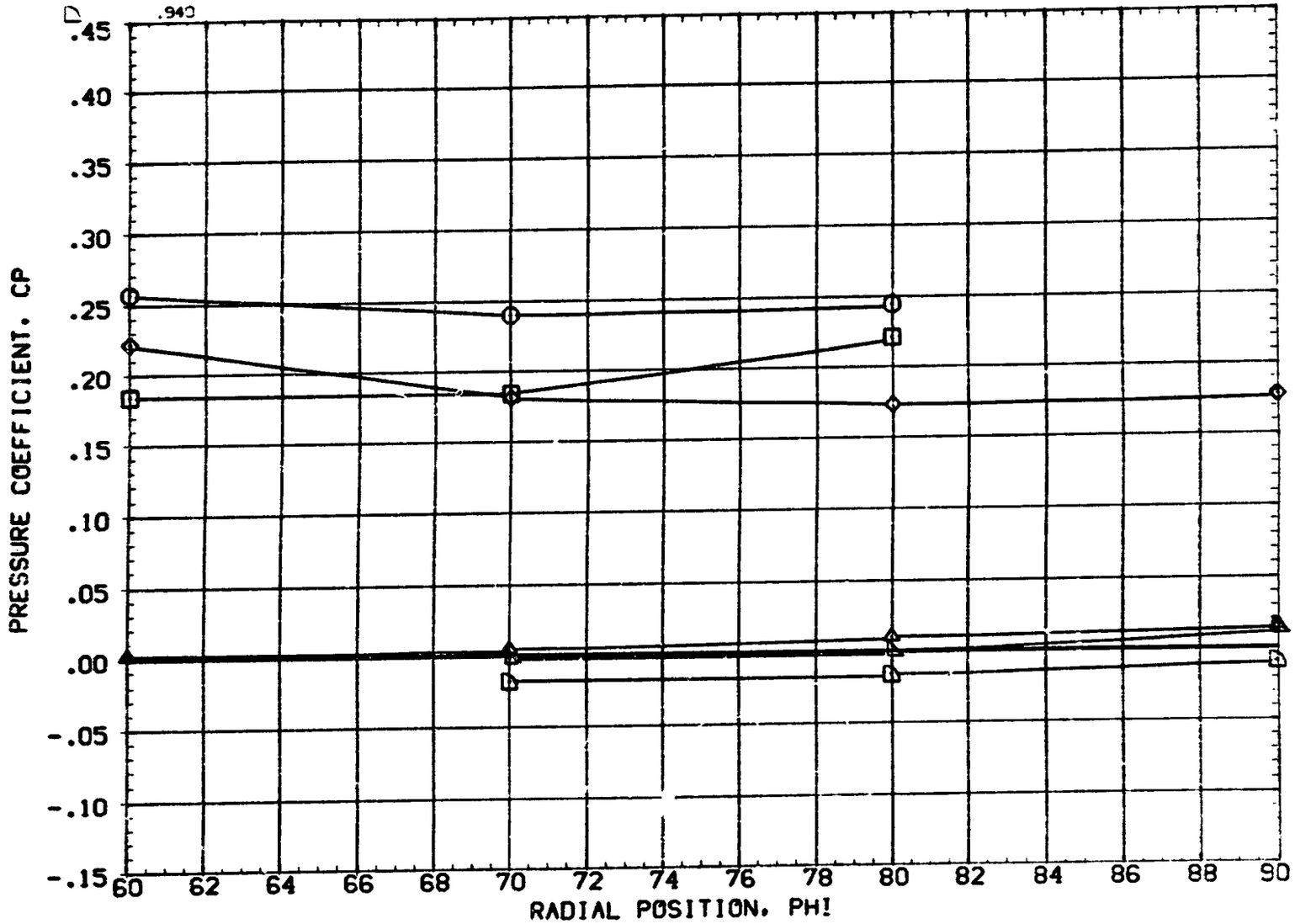
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

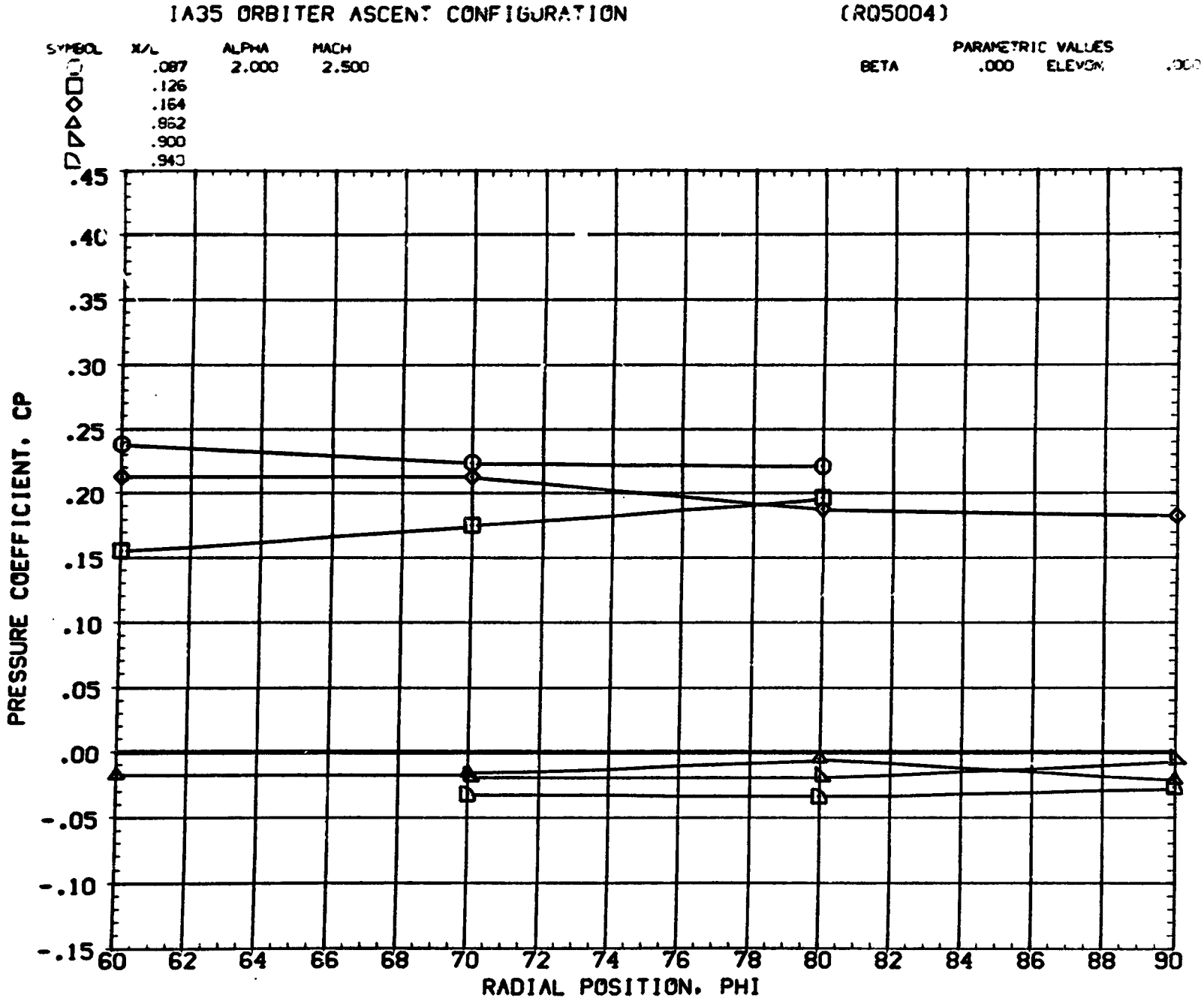
SYMBOL	X/L	ALPHA	MACH
	.087	.000	2.500
	.126		
	.164		
	.862		
	.900		
	.940		

PARAMETRIC VALUES

BETA .000 ELEVON .000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



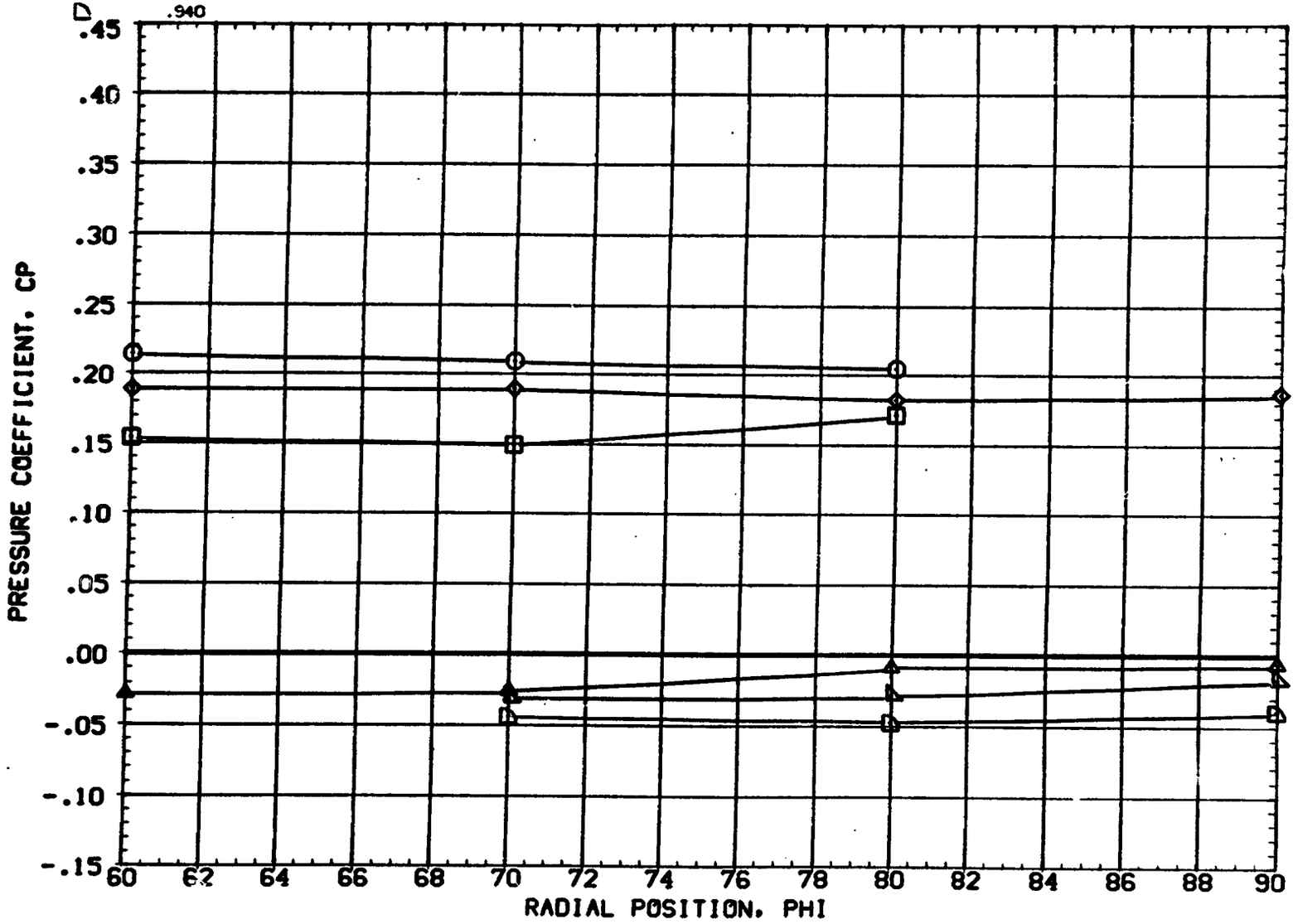
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

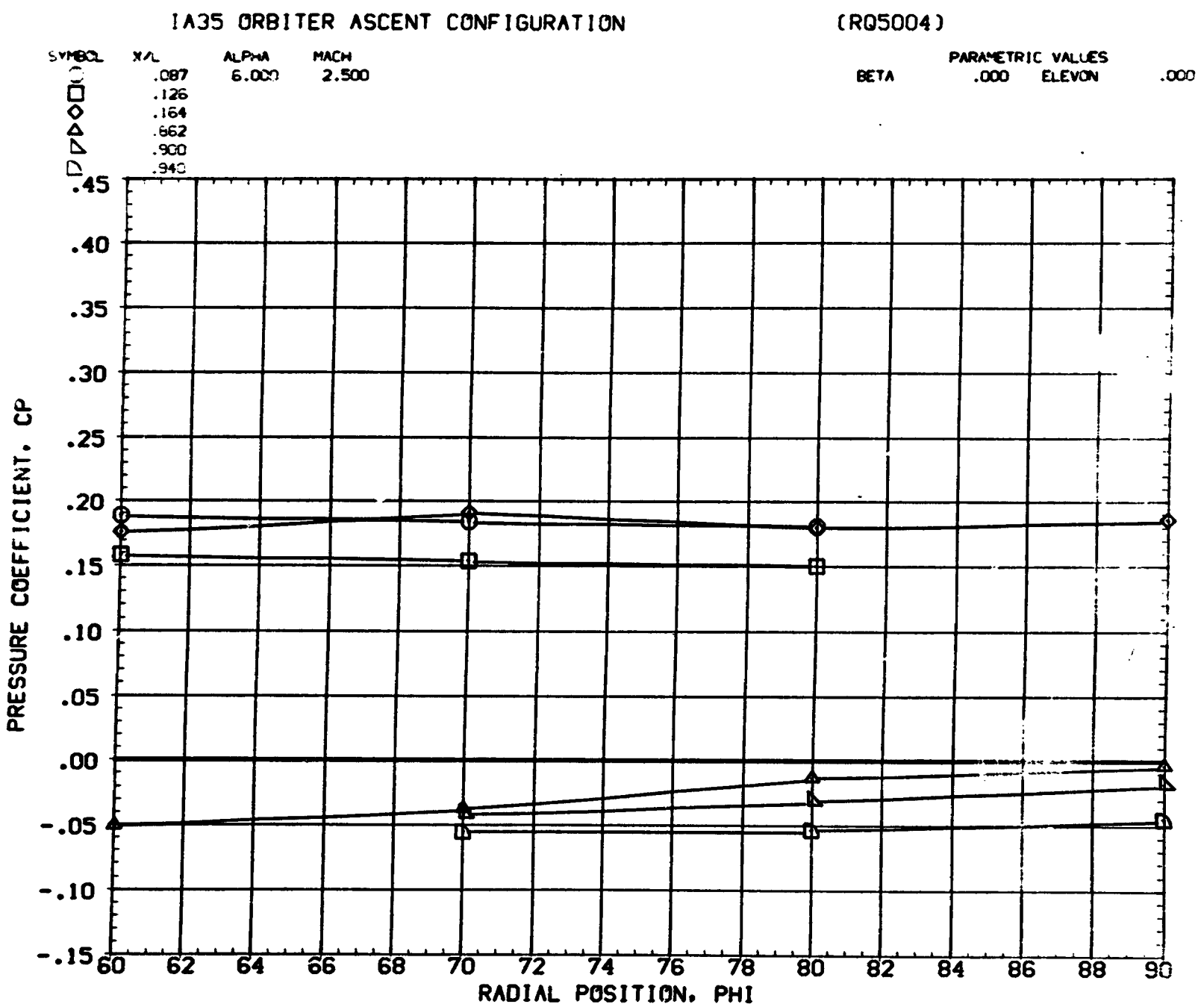
SYMBOL	X/L	ALPHA	MACH
○	.087	3.990	2.500
□	.126		
◇	.164		
△	.862		
◁	.900		
▷	.940		

PARAMETRIC VALUES

BETA .000 ELEVON .000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

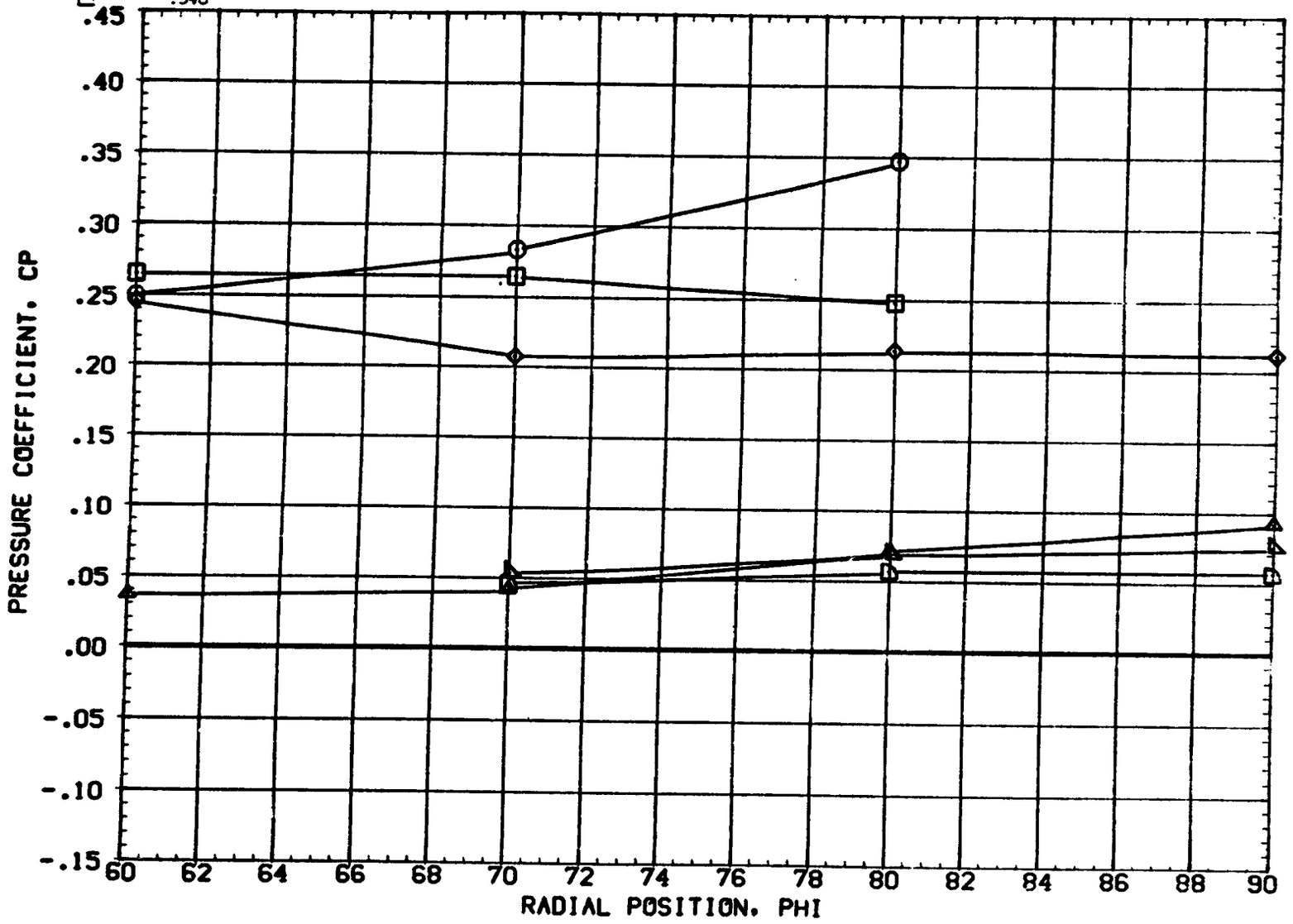


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

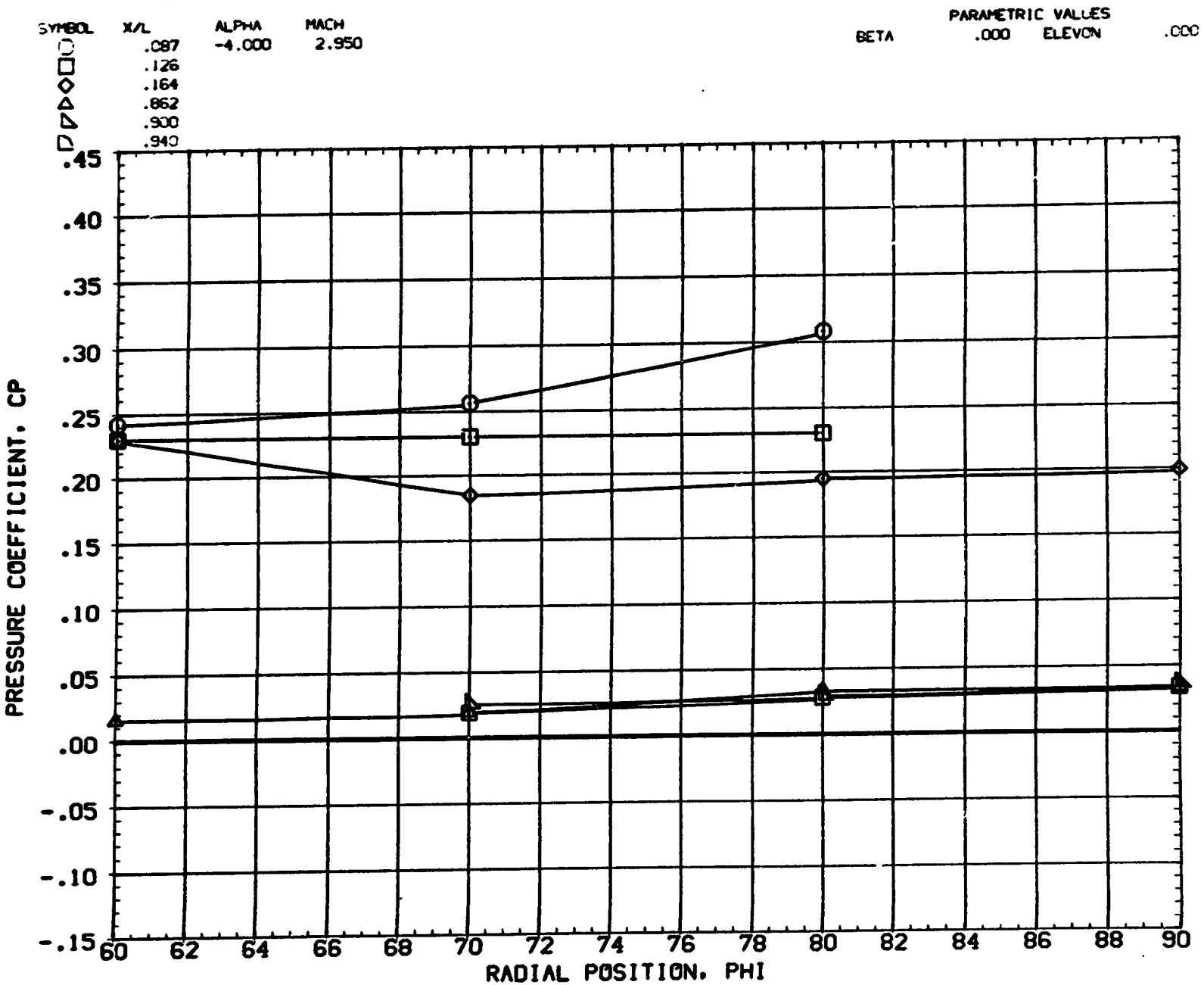
SYMBOL	X/L	ALPHA	MACH
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□	.126		
◇	.164		
△	.862		
▷	.900		
▽	.940		

PARAMETRIC VALUES
BETA .000 ELEVON .000



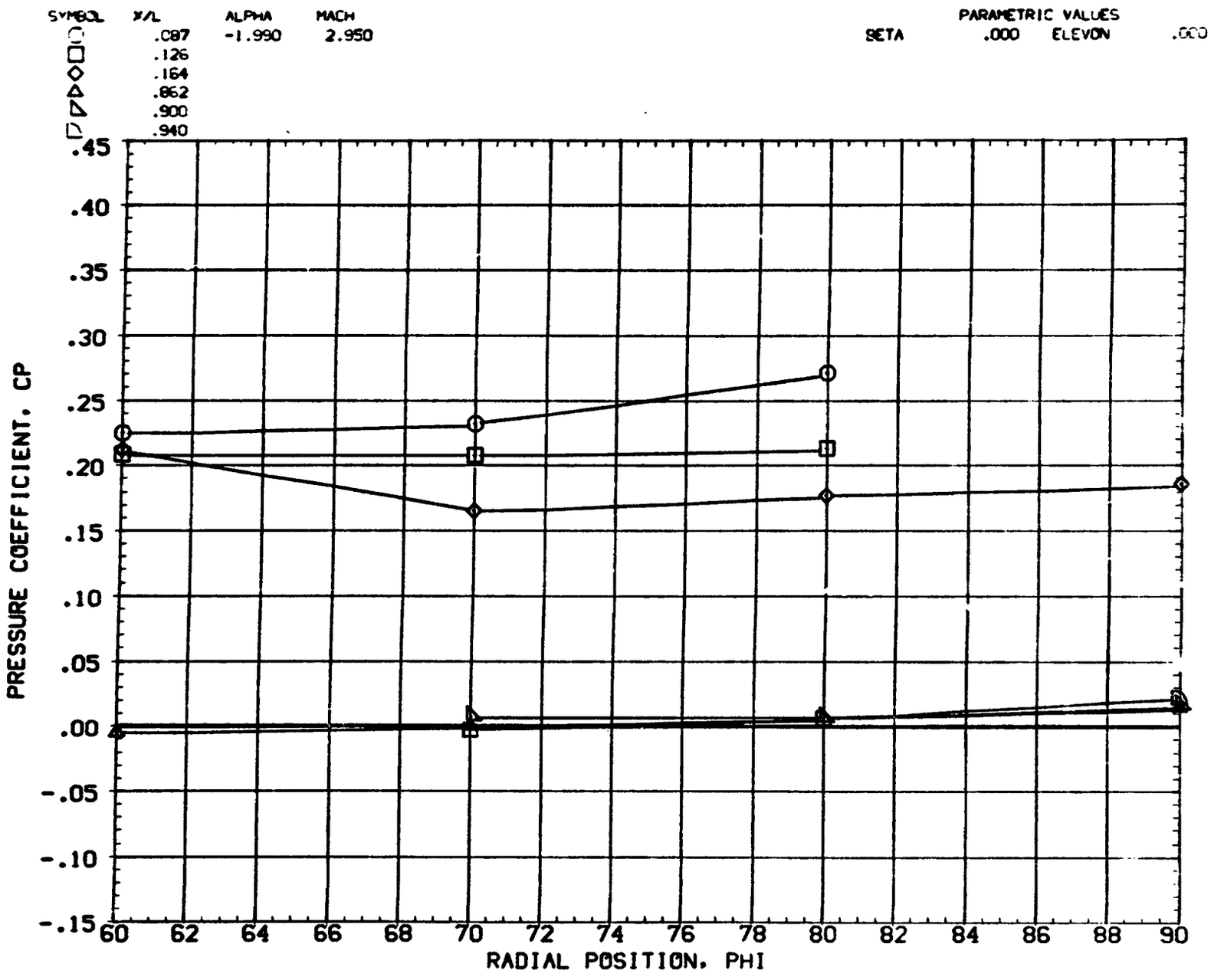
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)



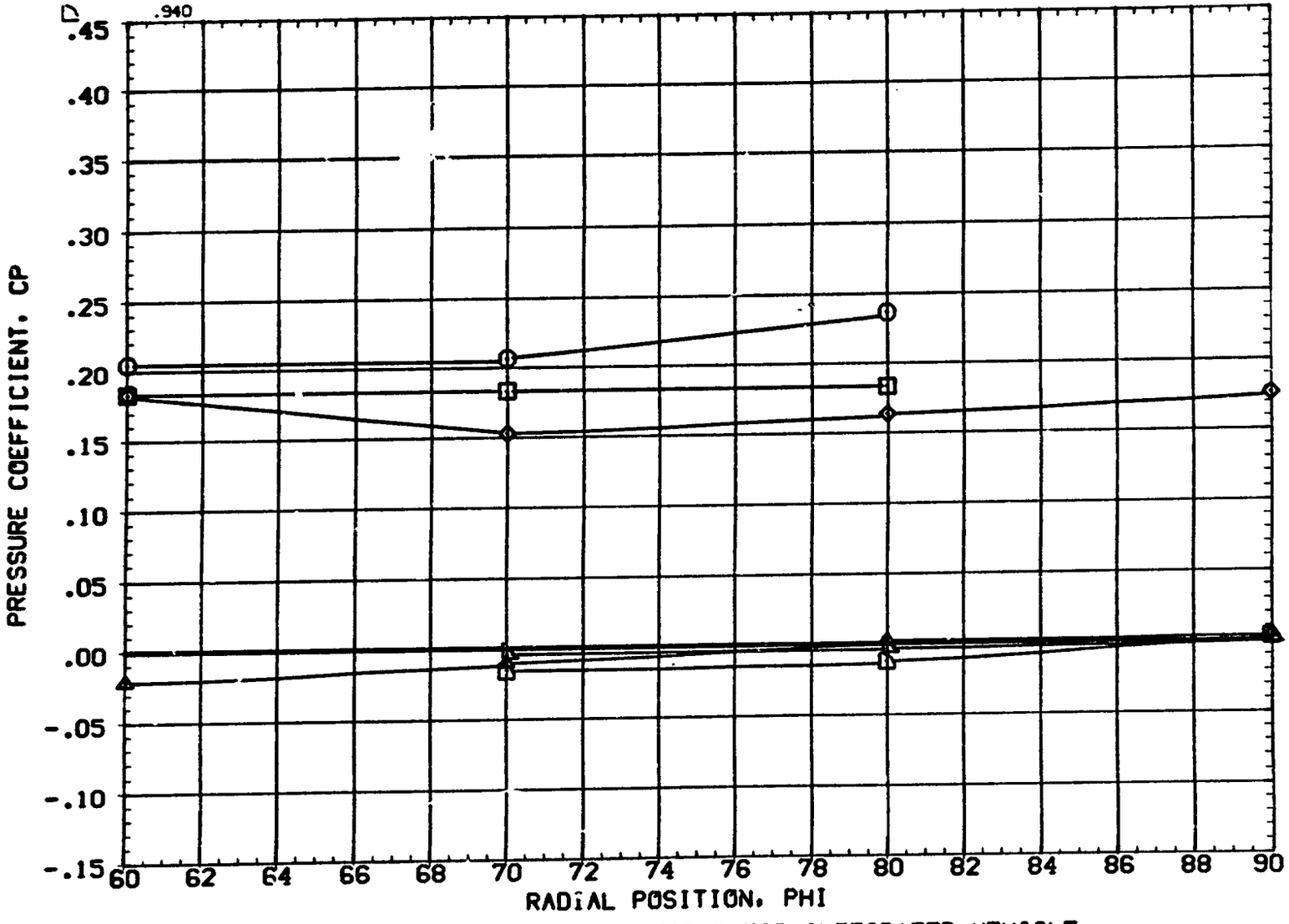
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
○	.087	.010	2.950
□	.126		
◇	.164		
△	.862		
▷	.900		
▽	.940		

PARAMETRIC VALUES

BETA .000 ELEVON .000



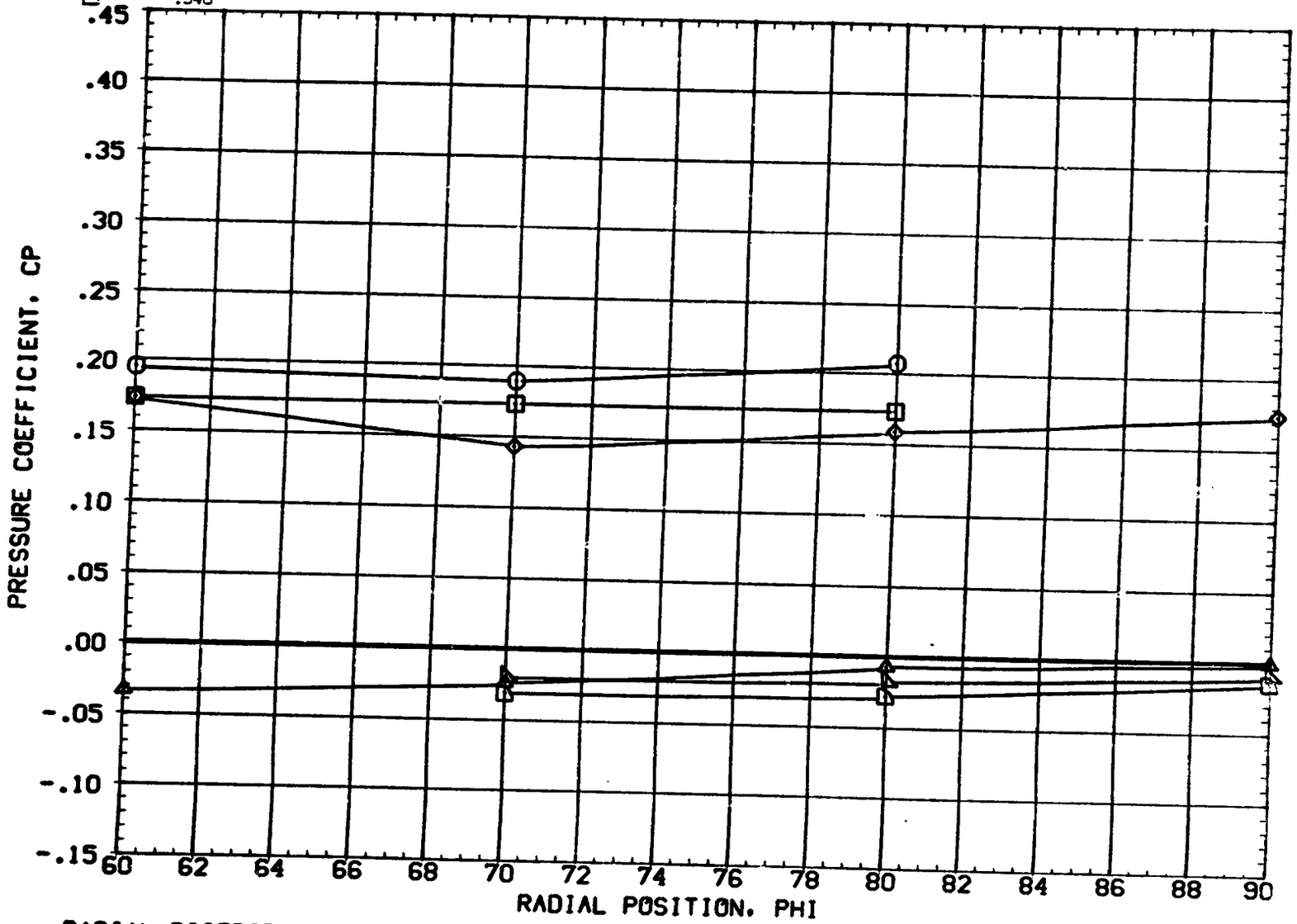
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
	.087	2.000	2.950
	.126		
	.164		
	.862		
	.900		
	.940		

PARAMETRIC VALUES

BETA .000 ELEVON .000



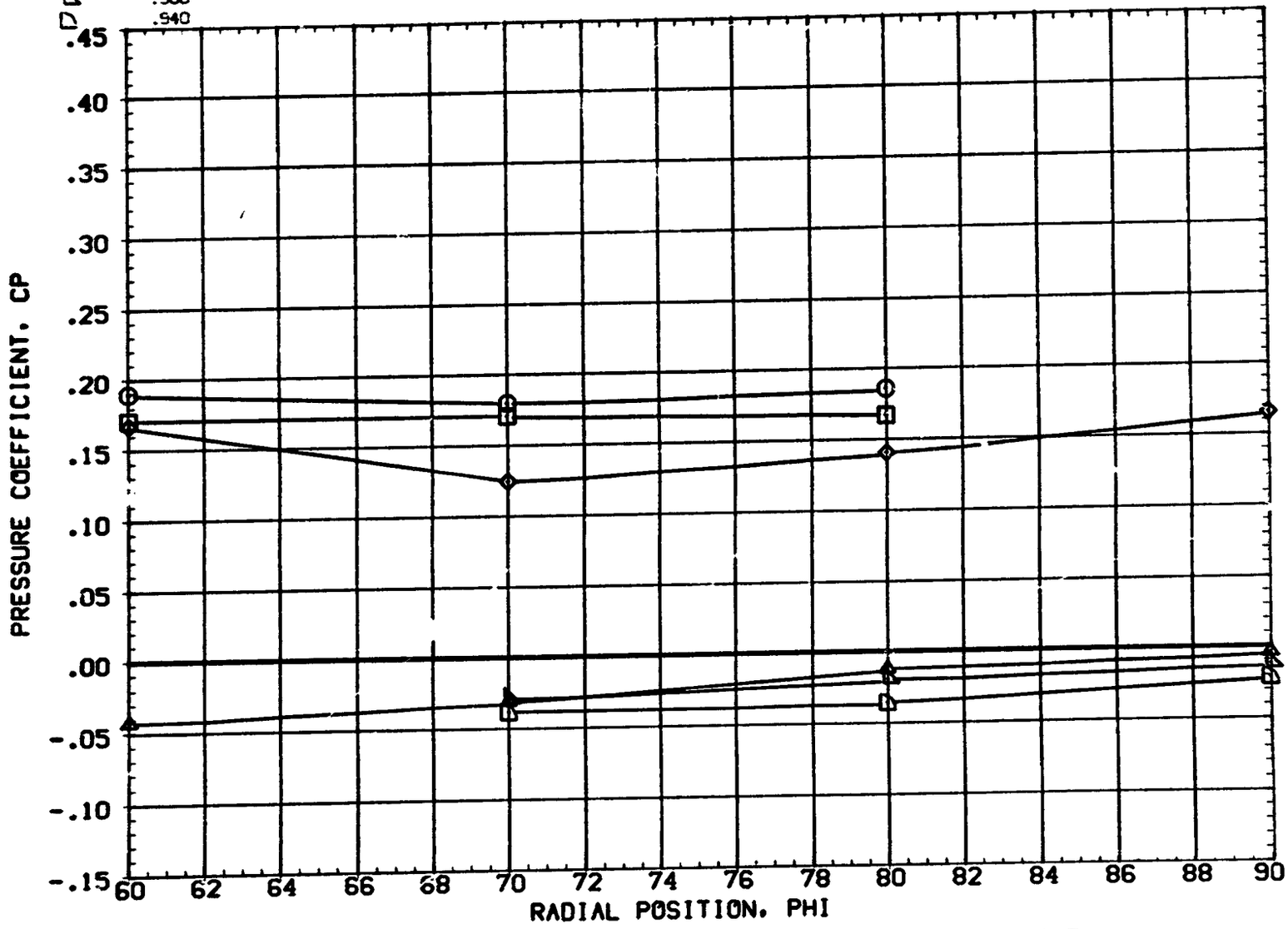
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

PARAMETRIC VALUES

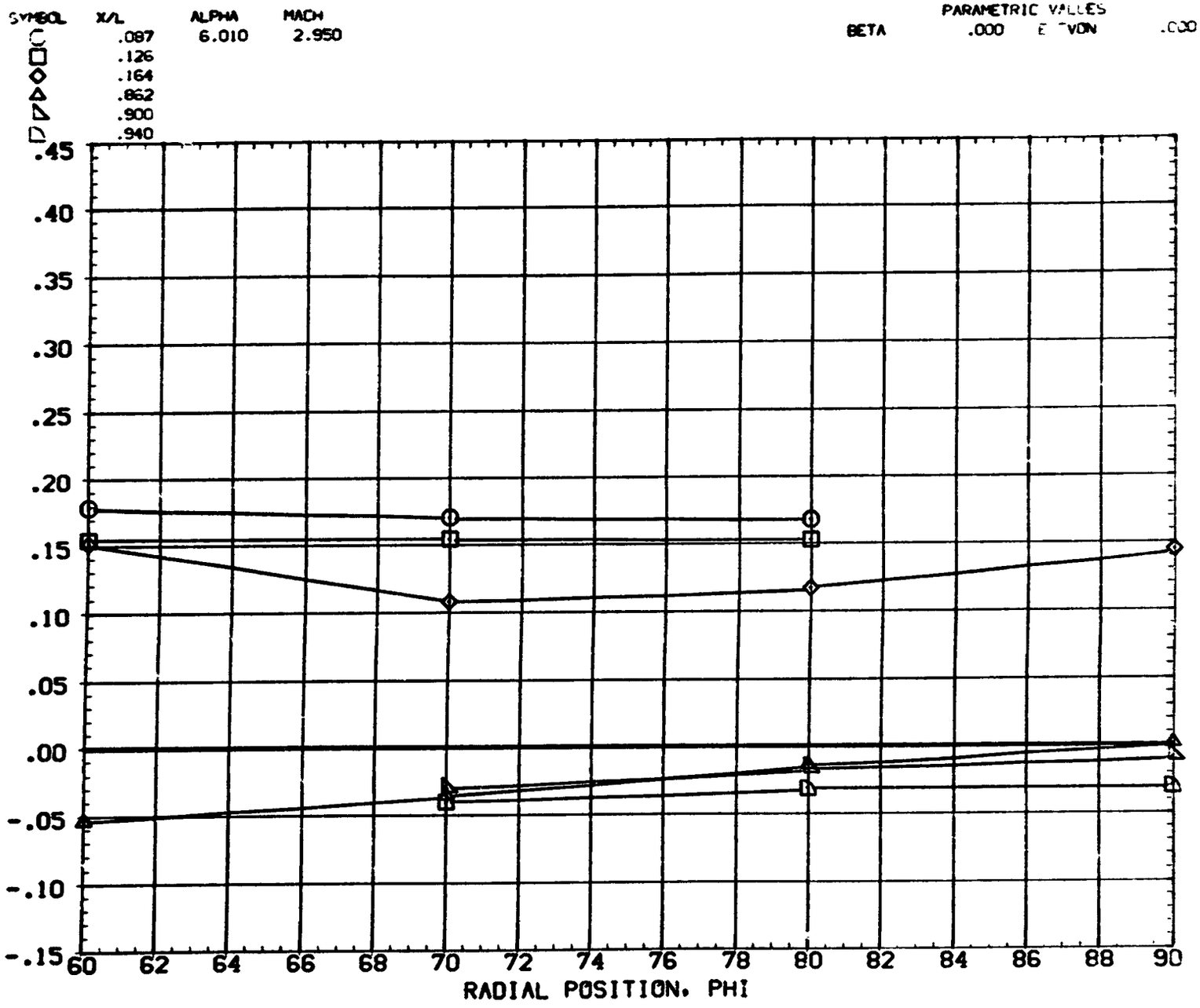
BETA .000 ELEVON .000

SYMBOL	X/L	ALPHA	MACH
○	.087	4.000	2.950
□	.126		
◇	.164		
△	.862		
▽	.900		
▷	.940		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)



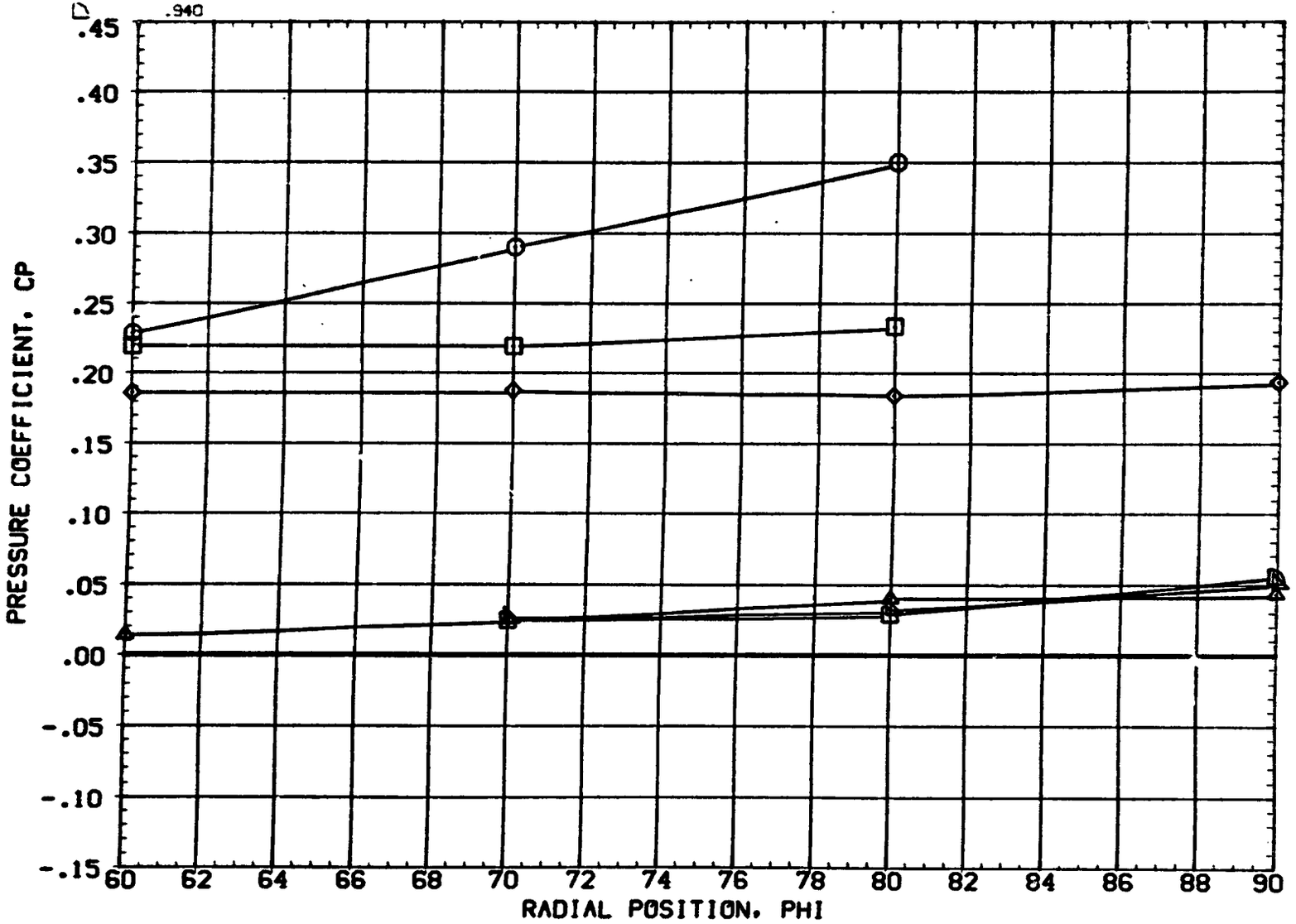
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
□	.087	-6.000	4.000
◇	.126		
◇	.164		
△	.862		
△	.900		
□	.940		

PARAMETRIC VALUES

BETA .000 ELEVON .000



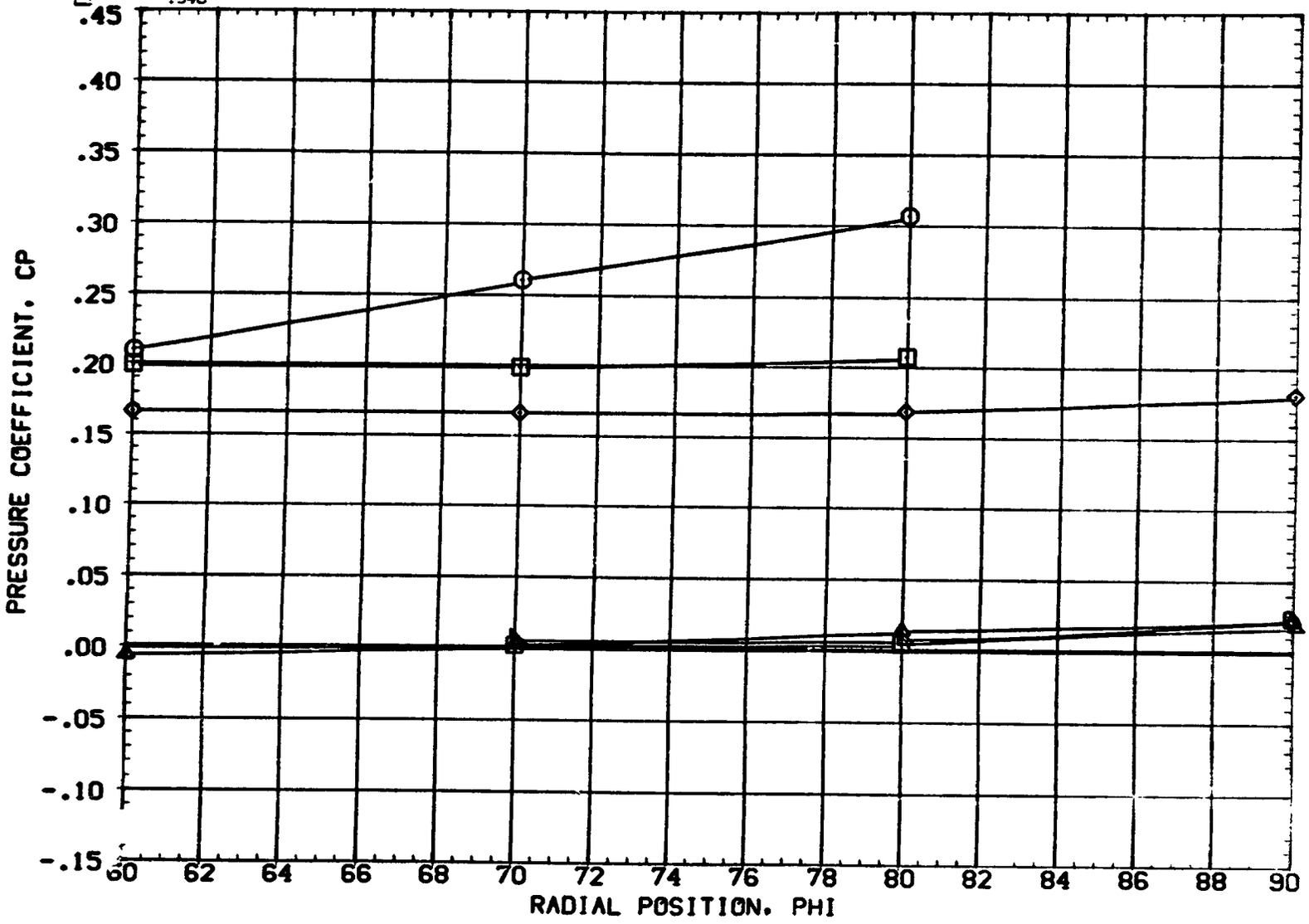
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

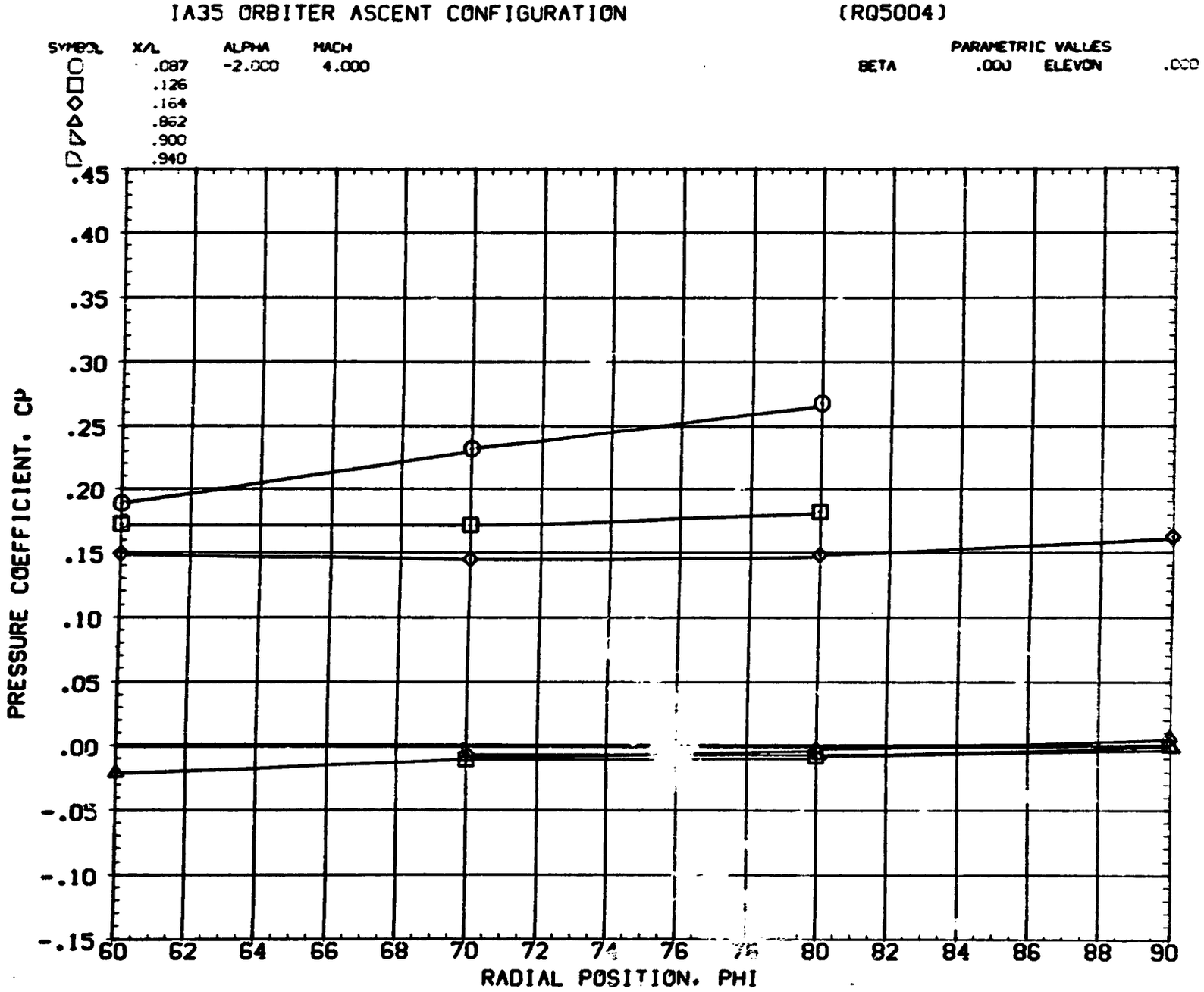
SYMBOL	X/L	ALPHA	MACH
▽	.087	-3.990	4.000
▷	.126		
◇	.164		
△	.862		
□	.900		
○	.940		

PARAMETRIC VALUES

BETA .000 ELEVON .000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

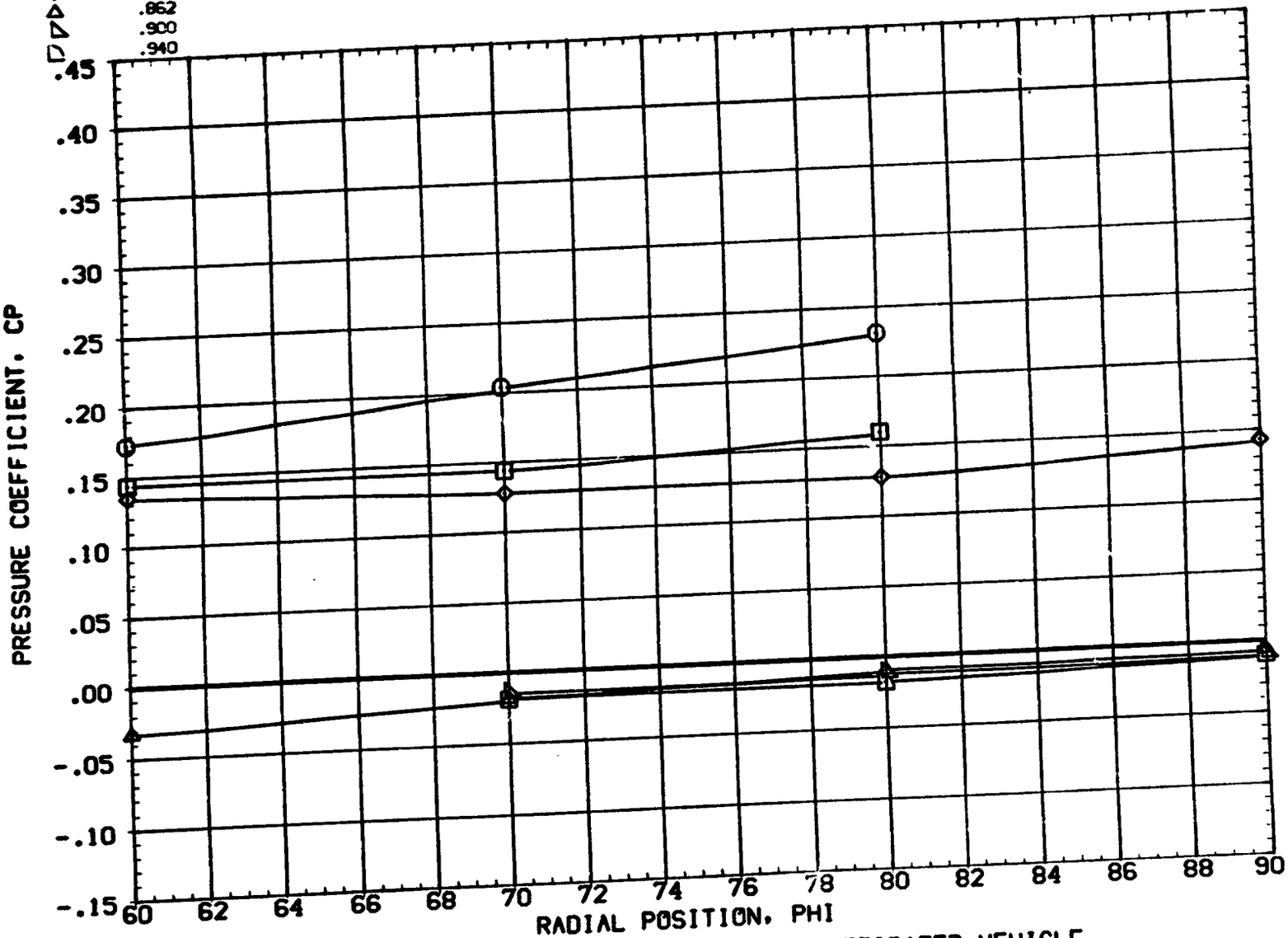
(RQ5004)

IA35 ORBITER ASCENT CONFIGURATION

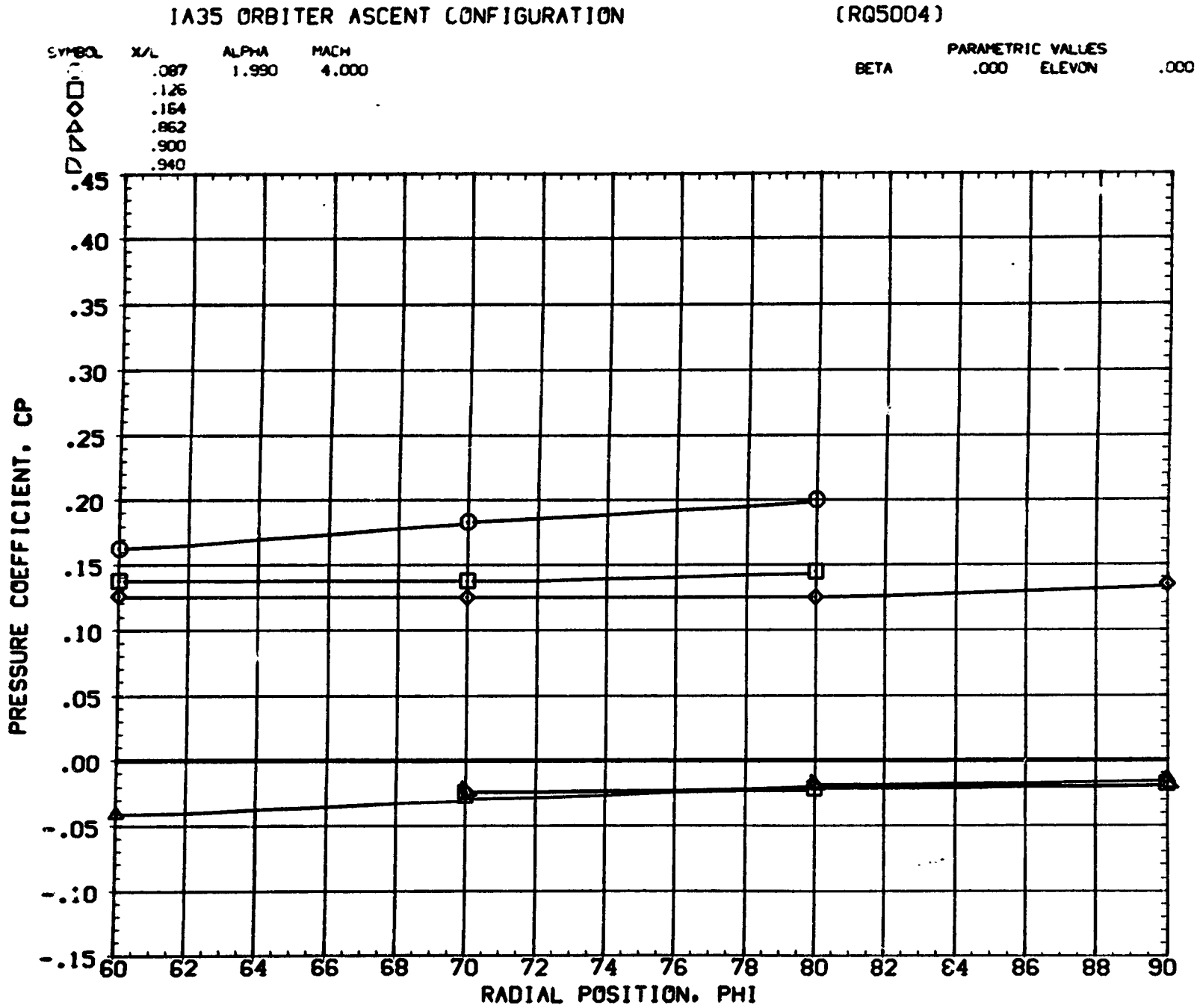
PARAMETRIC VALUES

BETA .000 ELEVON .000

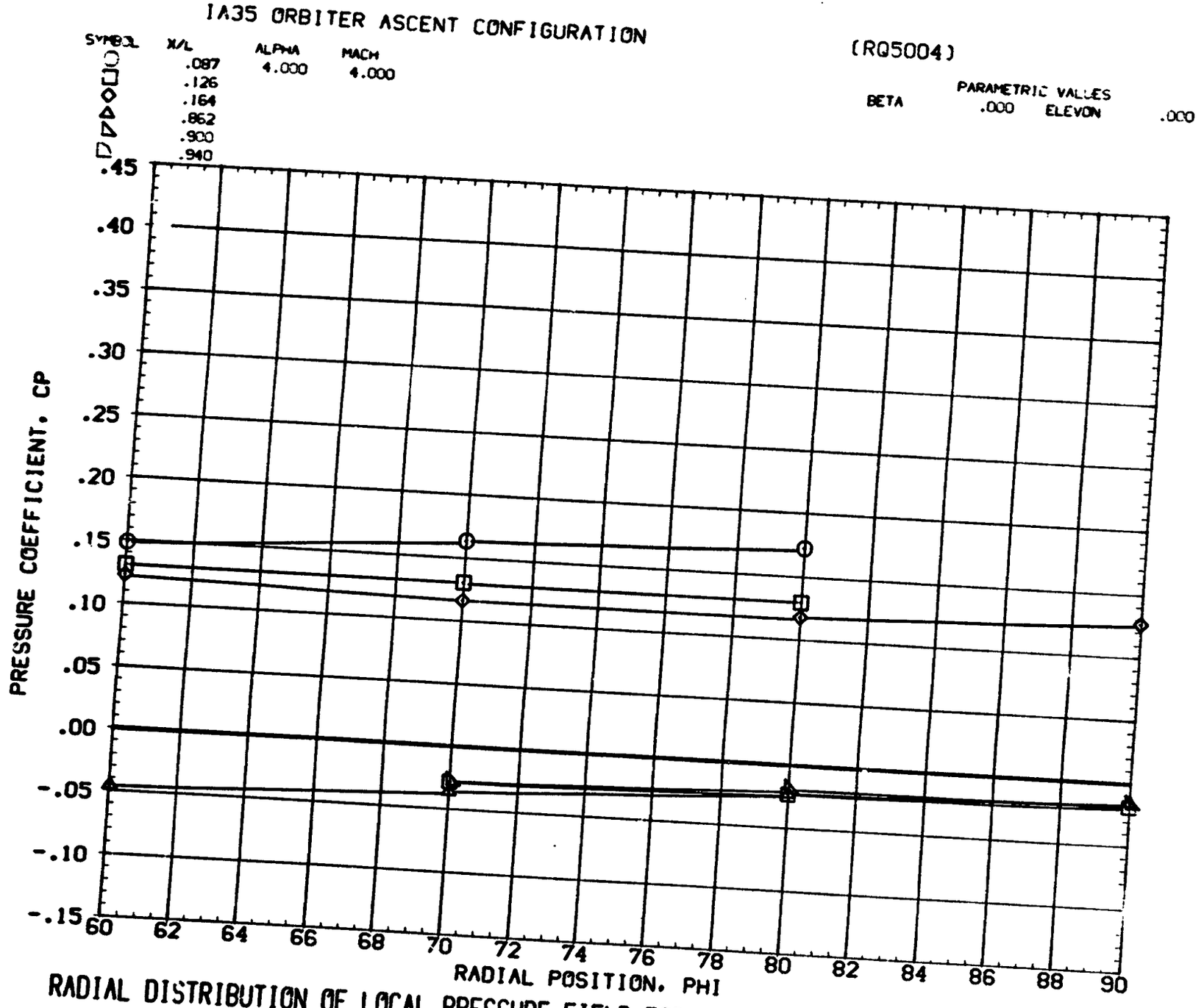
SYMBOL	X/L	ALPHA	MACH
○	.087	.010	4.000
△	.126		
▽	.164		
◇	.862		
□	.900		
○	.940		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

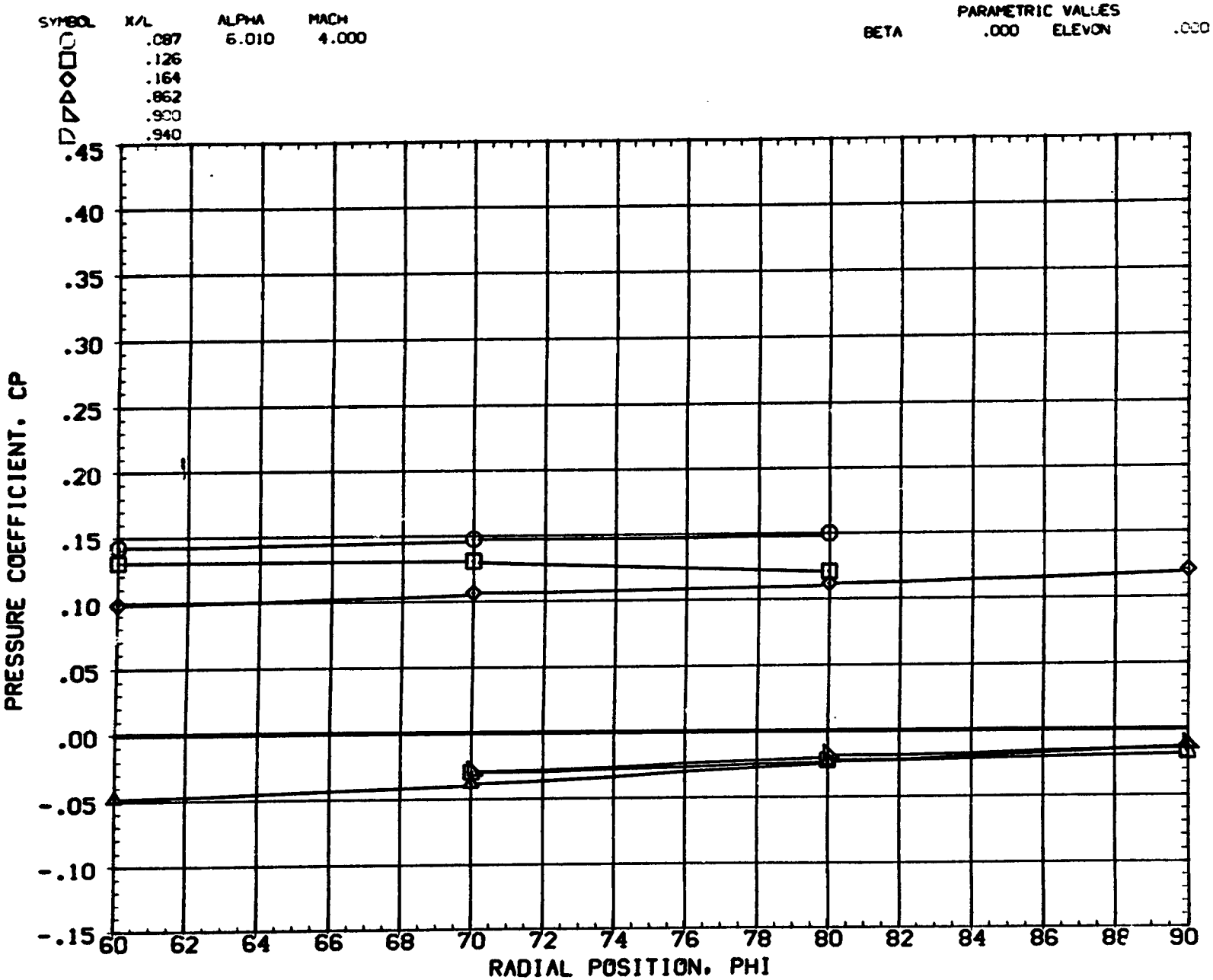


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

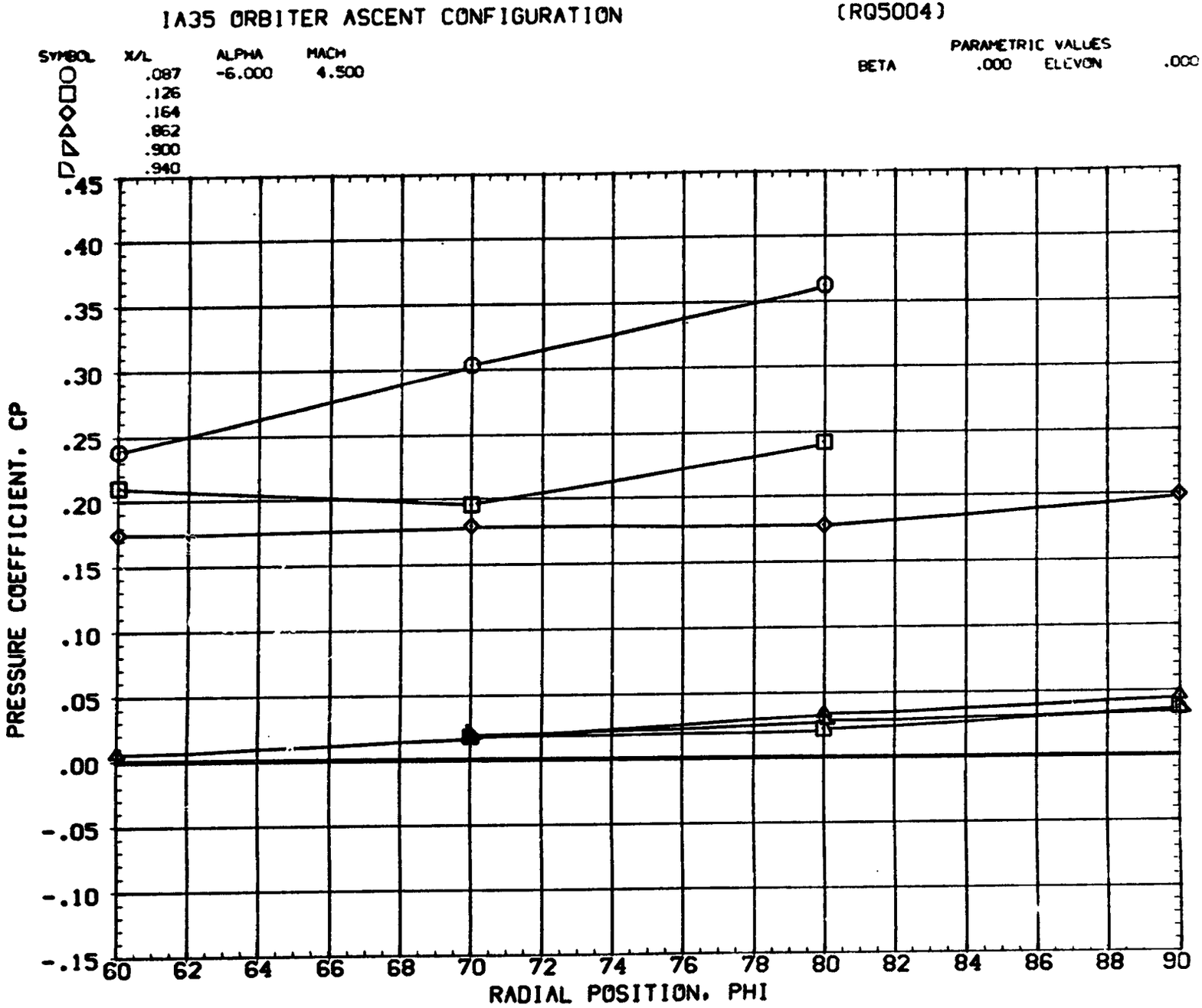


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



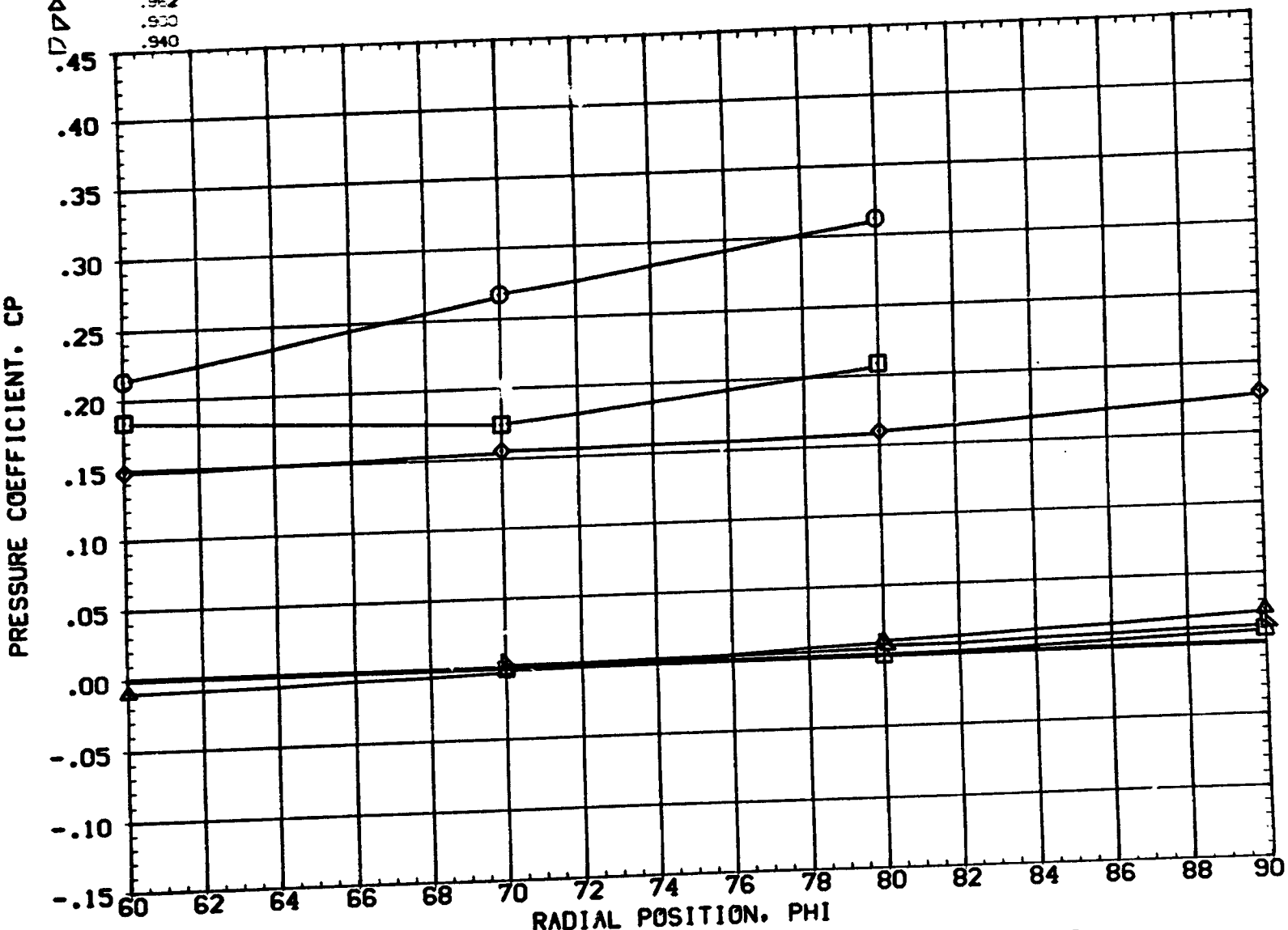
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

PARAMETRIC VALUES

BETA .000 ELEVON .000

SYMBOL	X/L	ALPHA	MACH
□	.087	-3.990	4.500
◇	.126		
△	.164		
▽	.962		
◇	.930		
□	.940		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

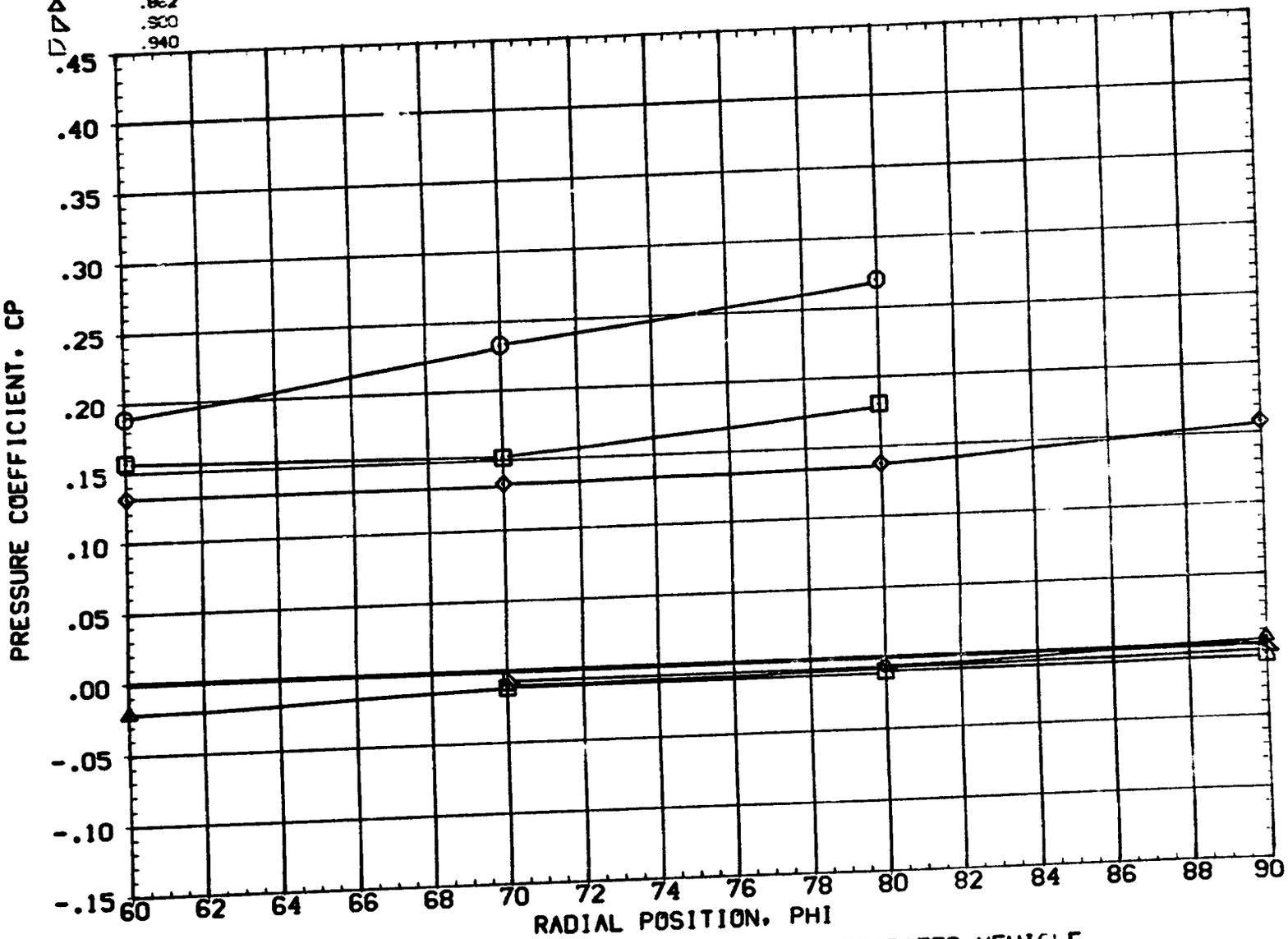
(RQ5004)

IA35 ORBITER ASCENT CONFIGURATION

PARAMETRIC ANGLES

BETA .000 ELEVON .000

SYMBOL	X/L	ALPHA	MACH
○	.087	-2.000	4.500
□	.126		
◇	.164		
△	.862		
▽	.900		
▷	.940		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

PARAMETRIC VALUES

BETA .000 ELEVON .000

SYMBOL X/L ALPHA MACH

.087 .000 4.500

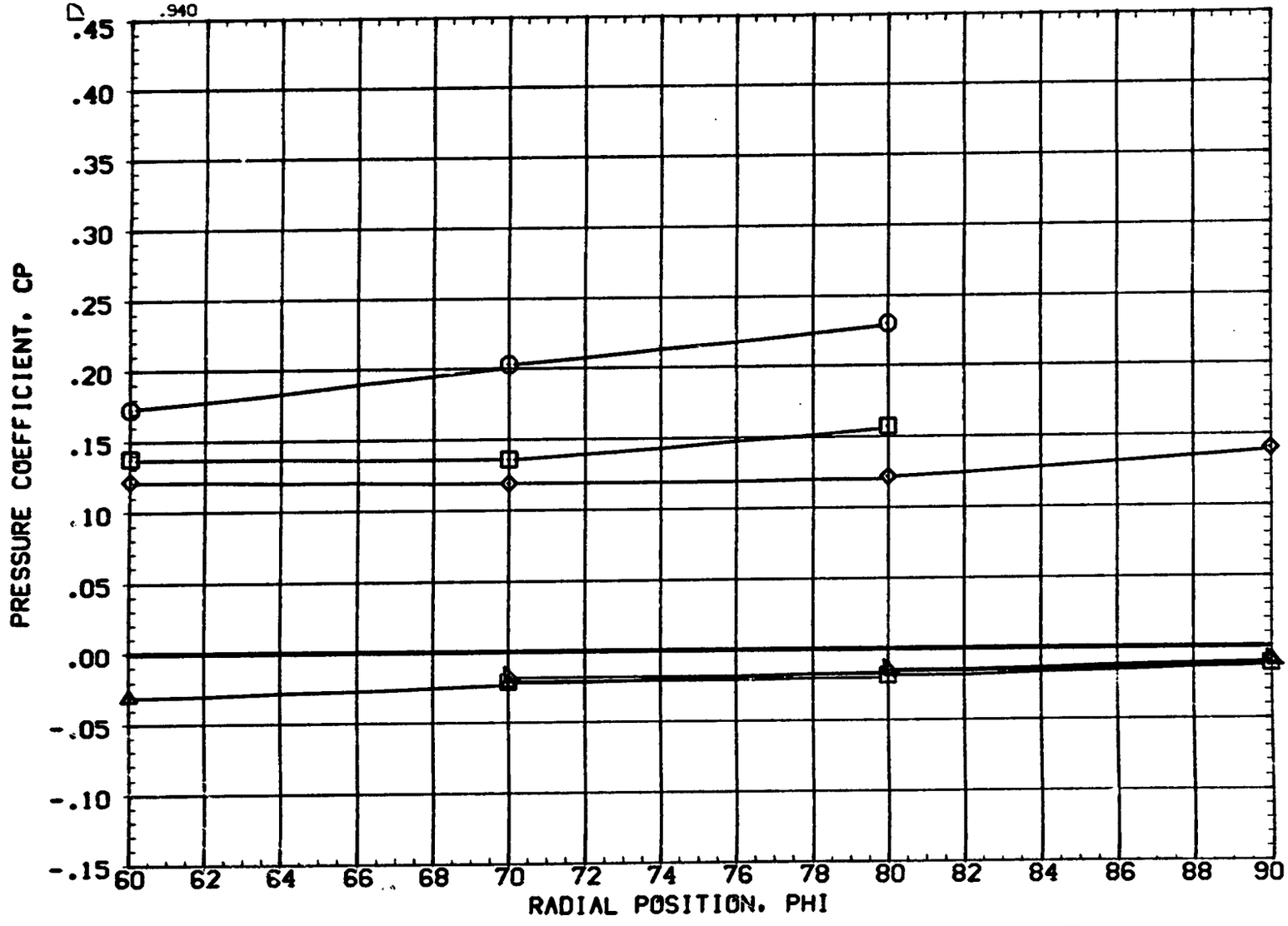
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.164

.862

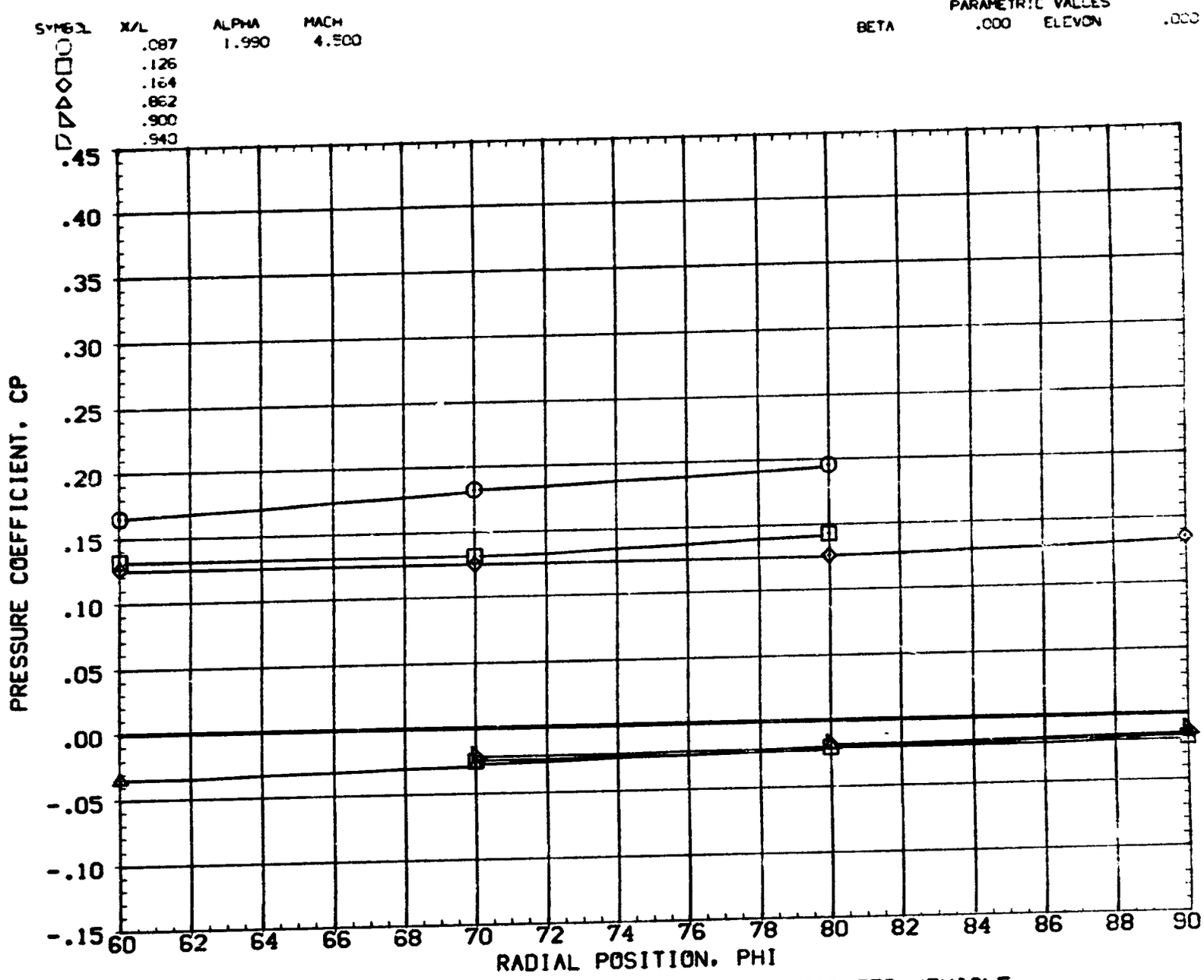
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RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)



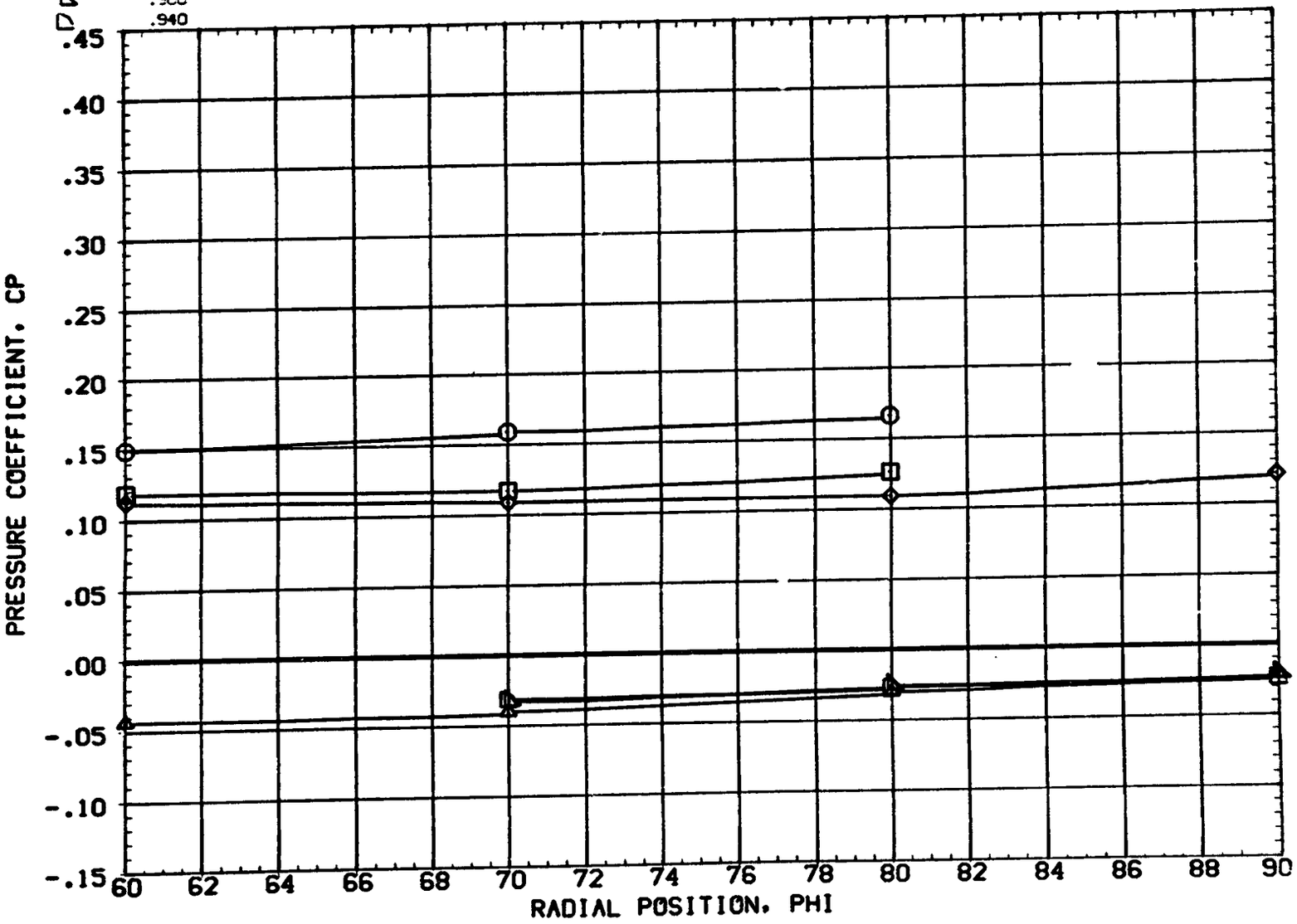
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

PARAMETRIC VALUES

BETA .000 ELEVON .000

SYMBOL	X/L	ALPHA	MACH
○	.087	4.010	4.500
□	.126		
◇	.164		
△	.862		
▷	.900		
▽	.940		

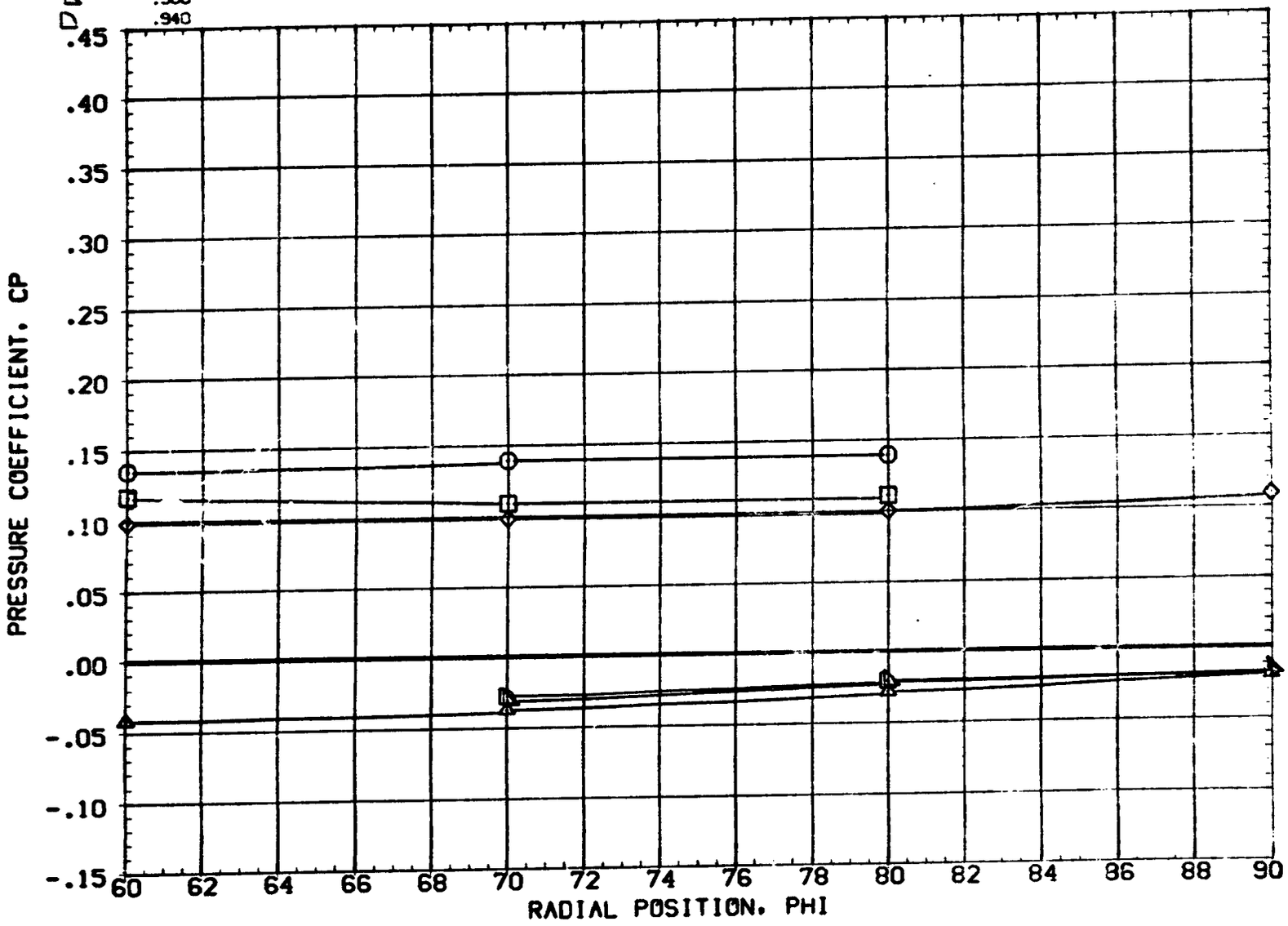


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

PARAMETRIC VALUES

SYMBOL	X/L	ALPHA	MACH	BETA	ELEVON
	.087	6.000	4.500	.000	.000
	.126				
	.164				
	.862				
	.900				
	.940				

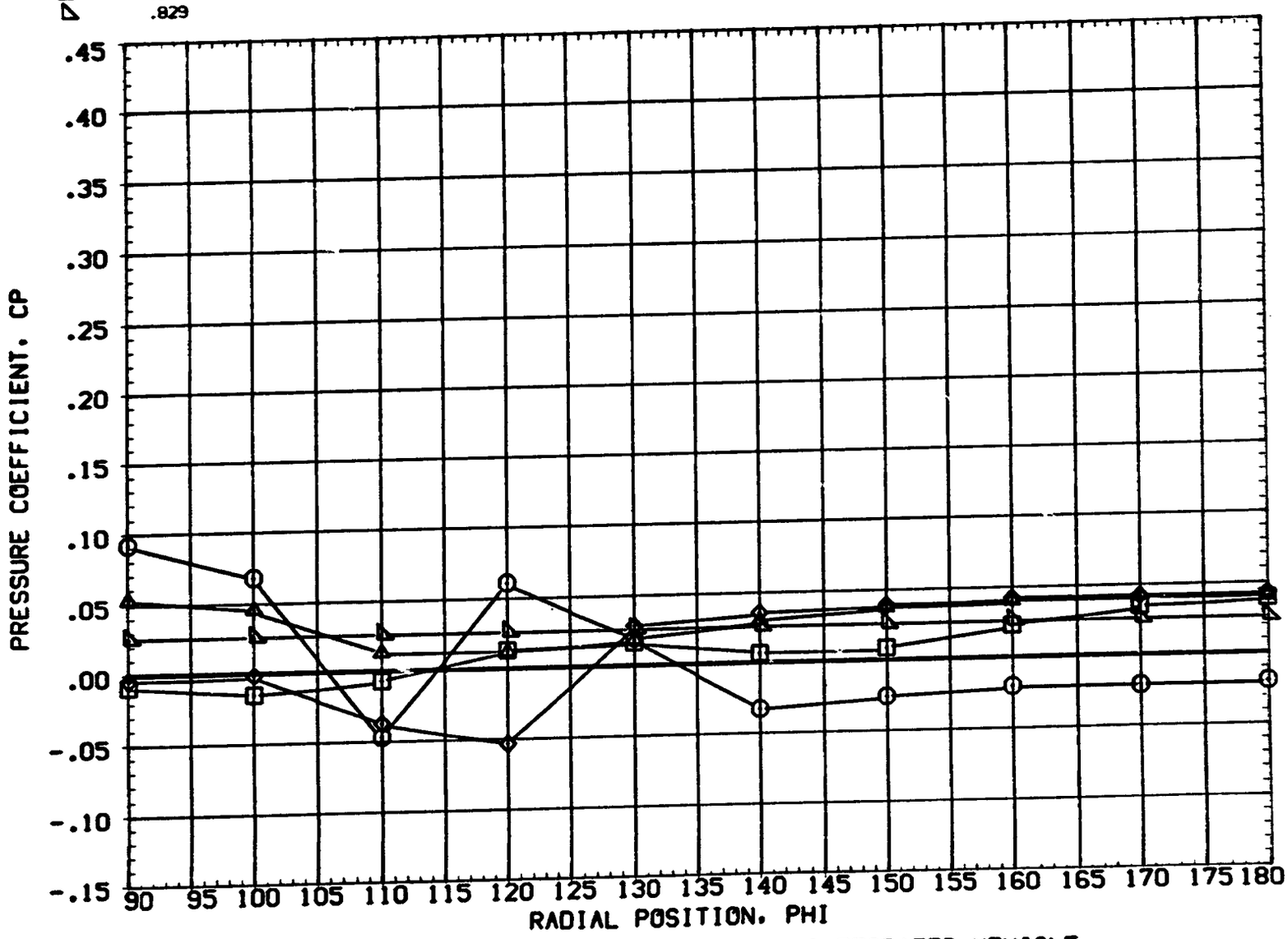


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
○	.264	-6.010	2.500
△	.405		
◇	.546		
□	.688		
▷	.829		

PARAMETRIC VALUES
BETA .000 ELEVON .000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

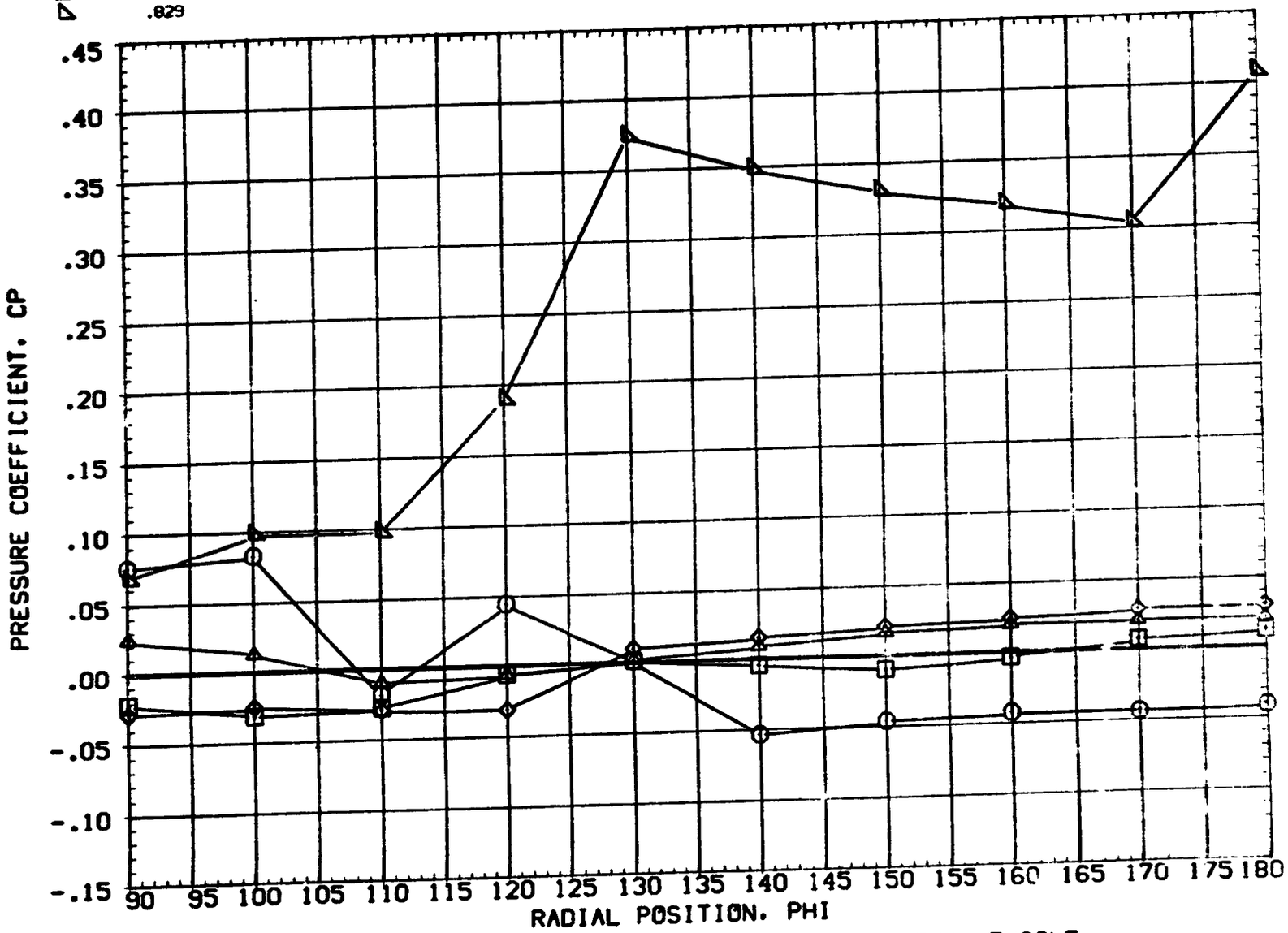
IA35 ORBITER ASCENT CONFIGURATION

(RQ5004)

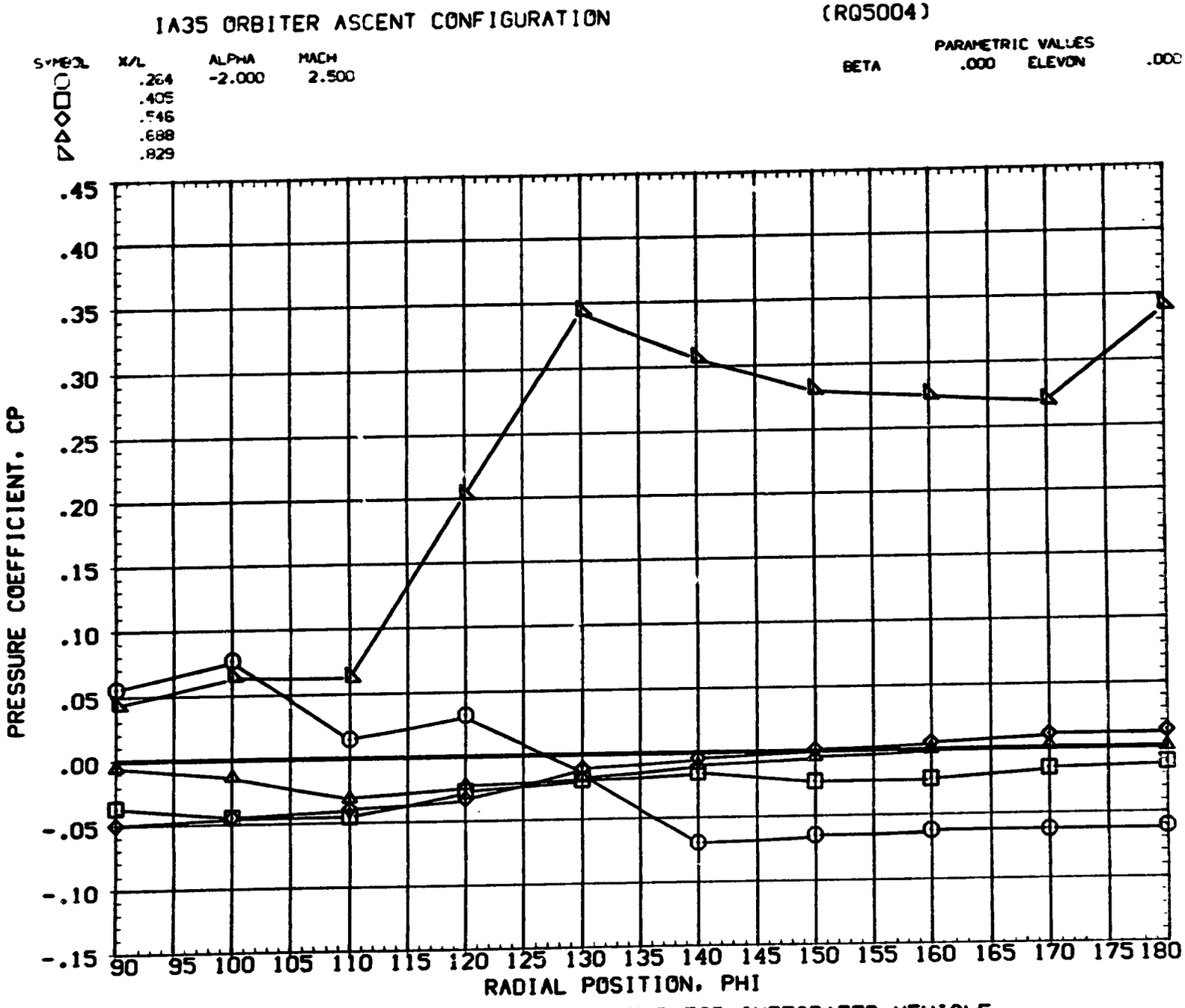
PARAMETRIC VALUES

BETA .000 ELEVON .000

SYMBOL	X/L	ALPHA	MACH
○	.264	-3.990	2.500
□	.405		
◇	.546		
△	.688		
▷	.829		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



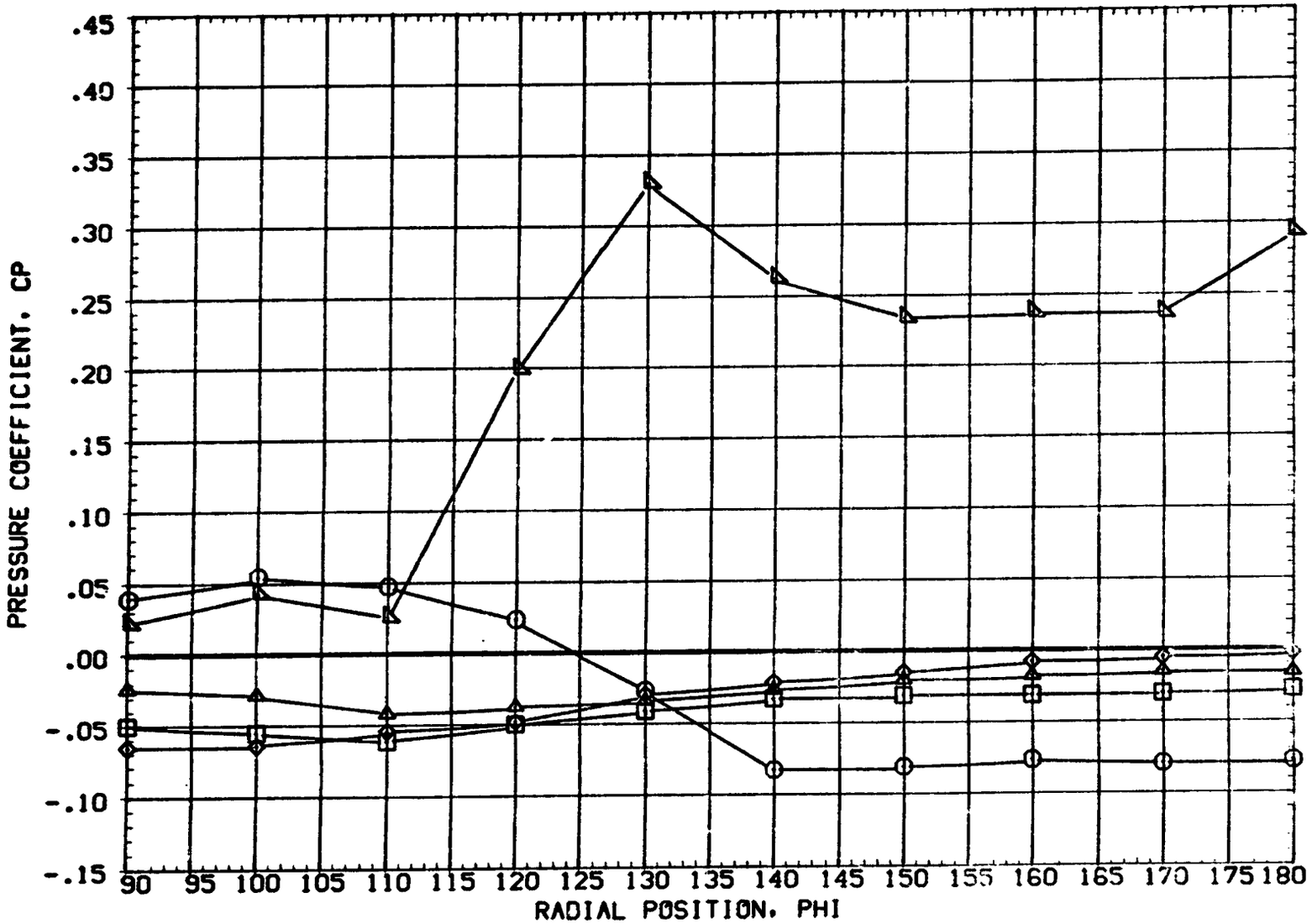
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
○	.264	.000	2.500
□	.405		
◇	.546		
△	.688		
▽	.829		

PARAMETRIC VALUES

BETA .000 ELEVON .000

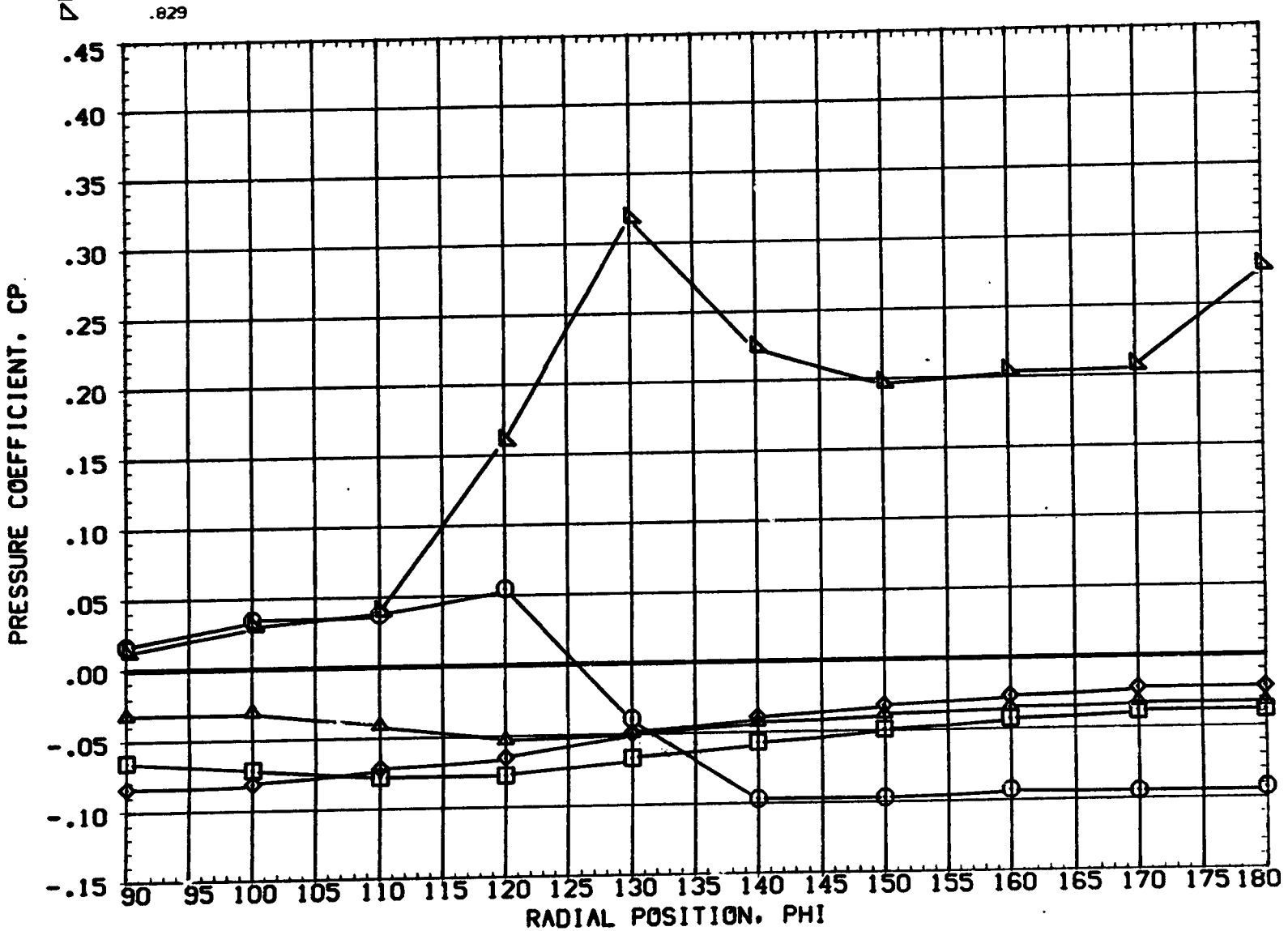


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
○	.264	2.000	2.500
□	.405		
◇	.546		
△	.688		
▷	.829		

PARAMETRIC VALUES
BETA . .000 ELEVON .000



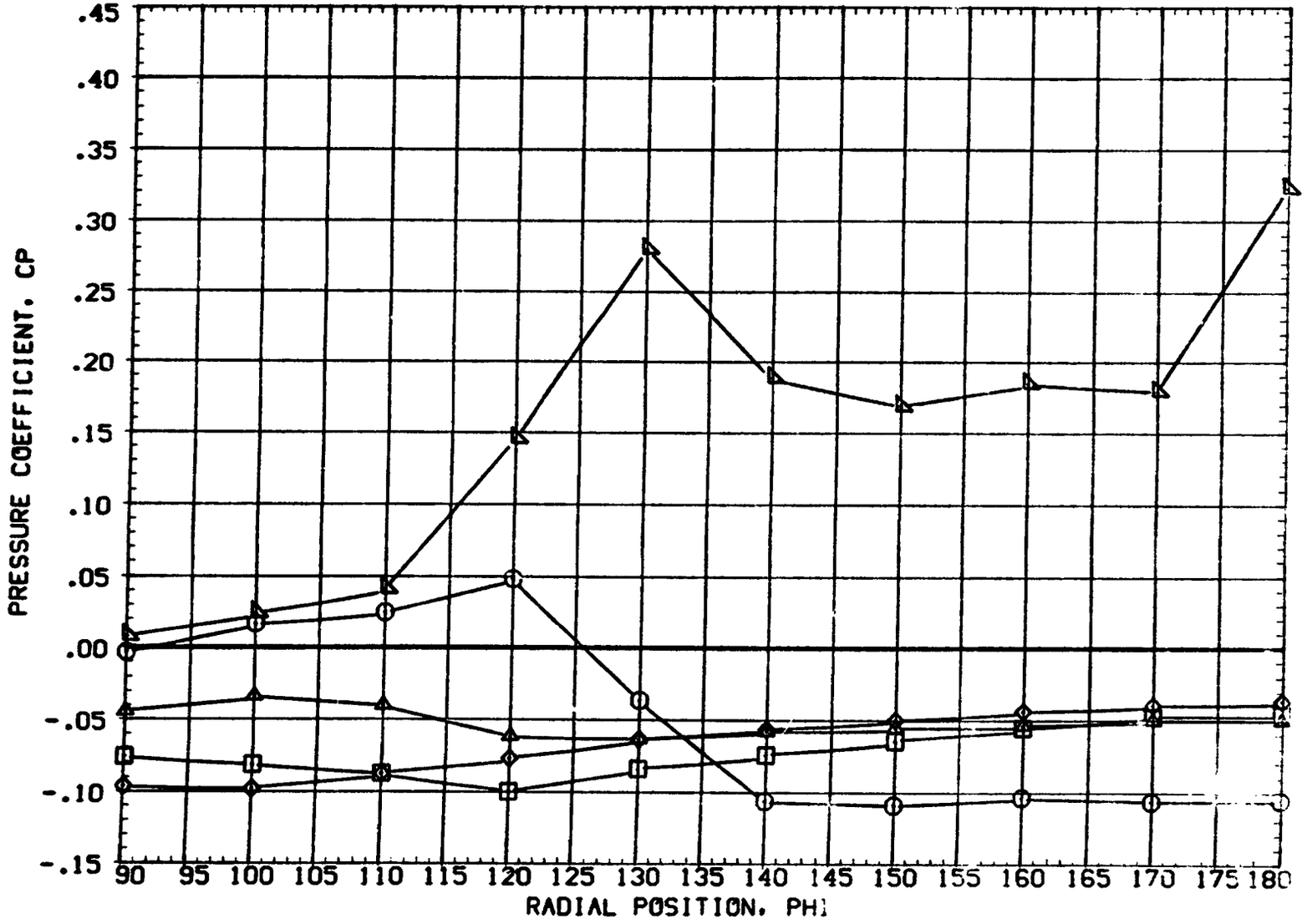
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

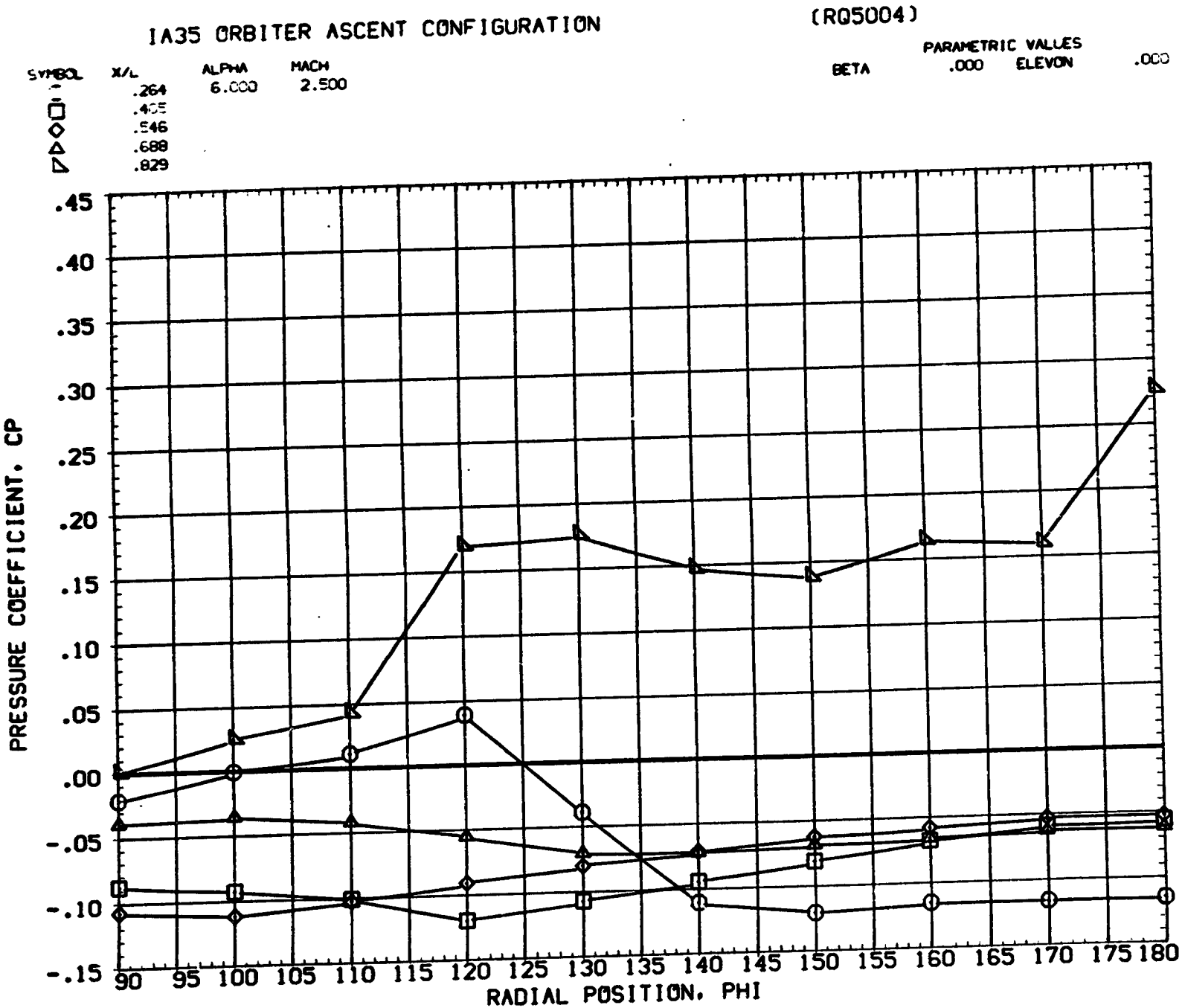
SYMBOL	X/L	ALPHA	MACH
	.264	3.990	2.500
	.405		
	.546		
	.688		
	.829		

PARAMETRIC VALUES

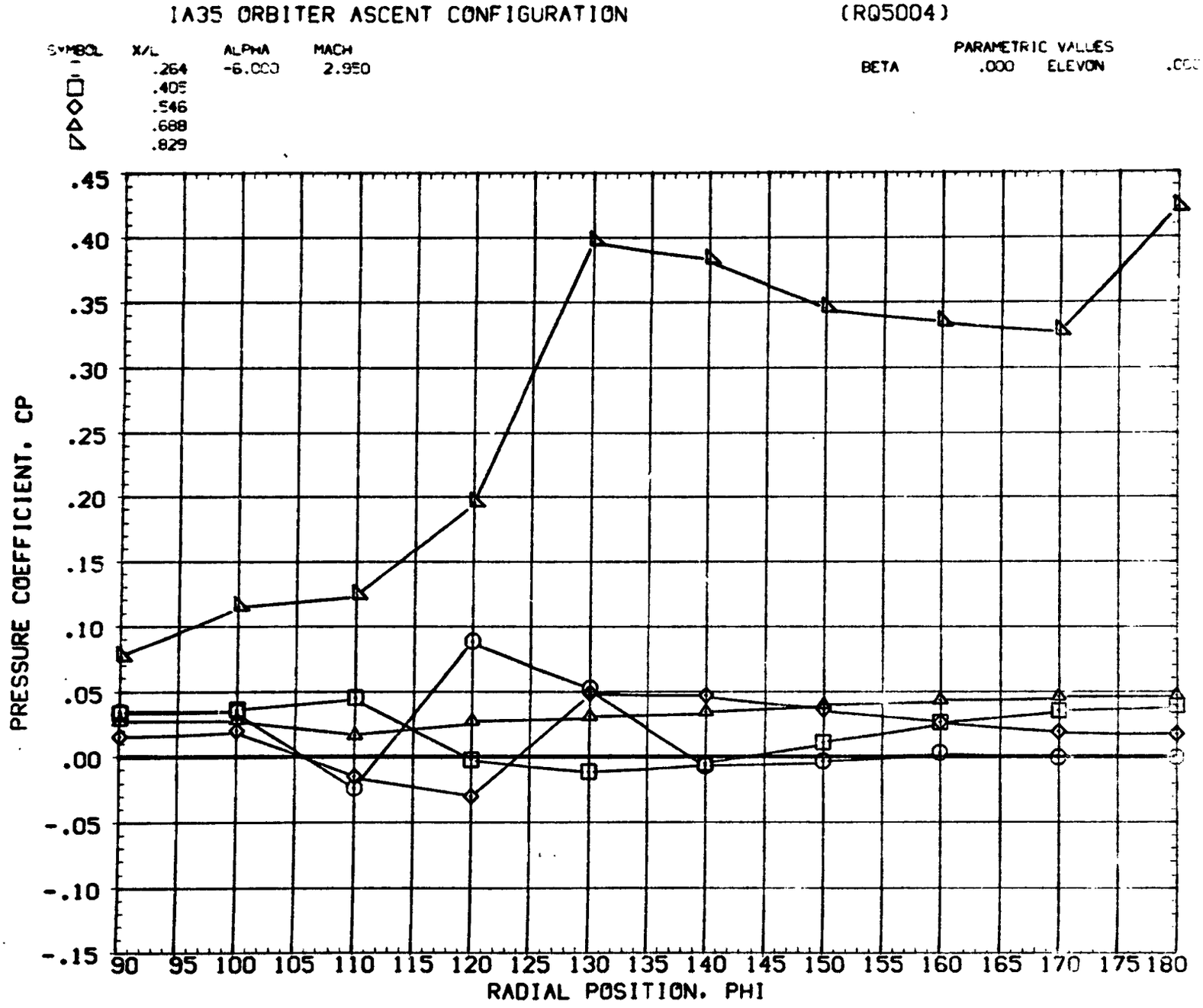
BETA .000 ELEVON .000



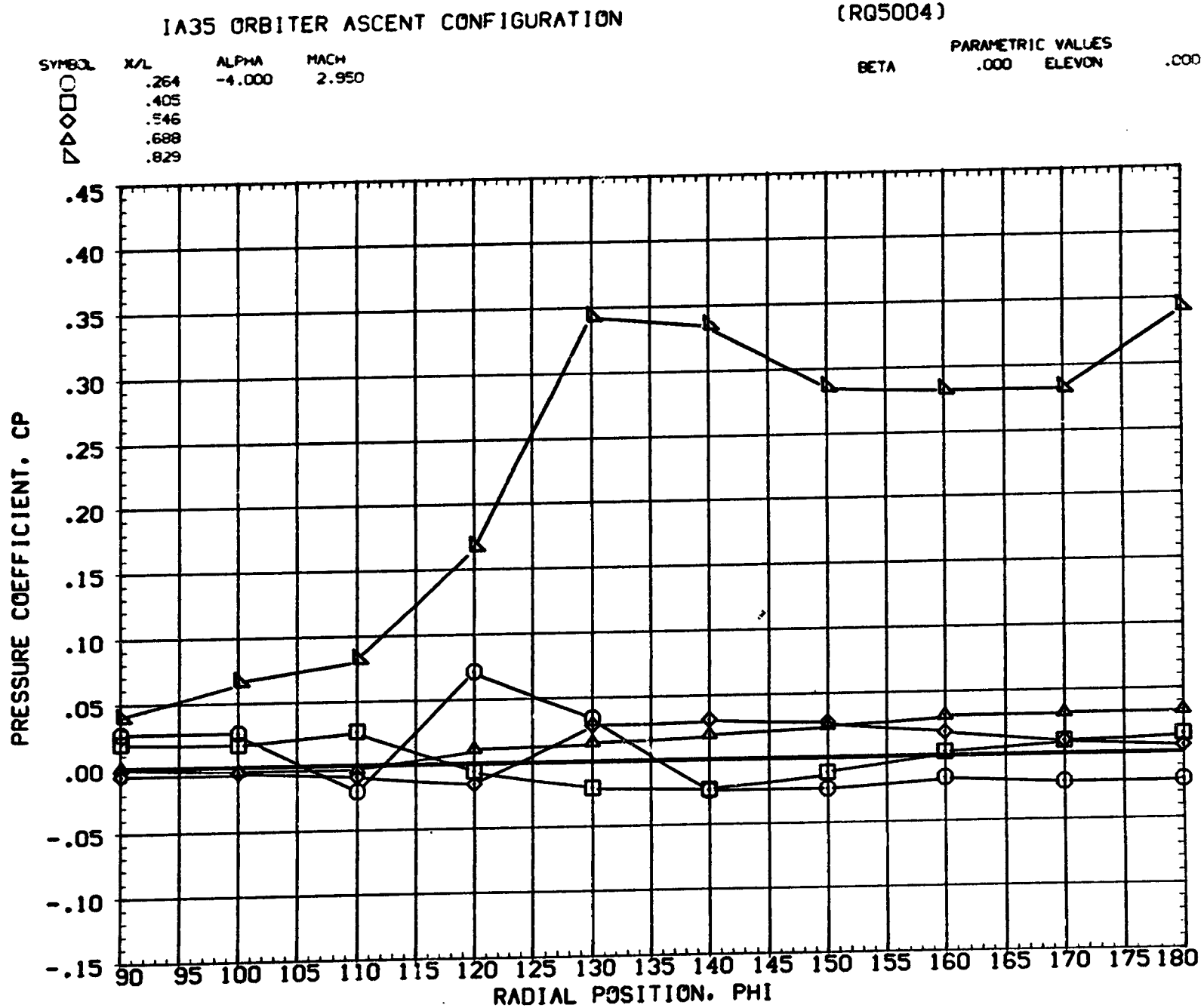
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



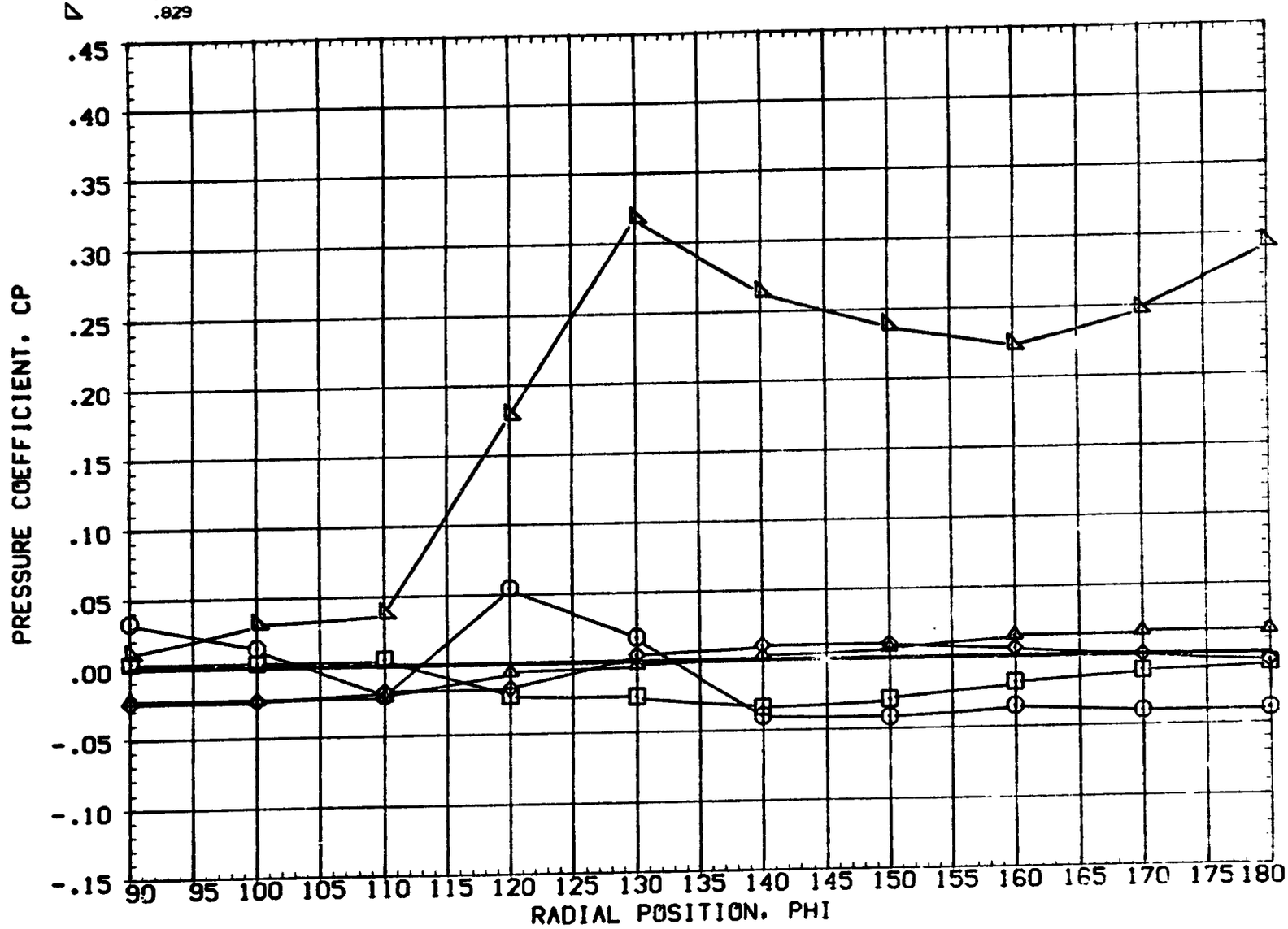
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
	.264	-1.990	2.950
	.405		
	.546		
	.688		
	.829		

PARAMETRIC VALUES

BETA .000 ELEVON .000



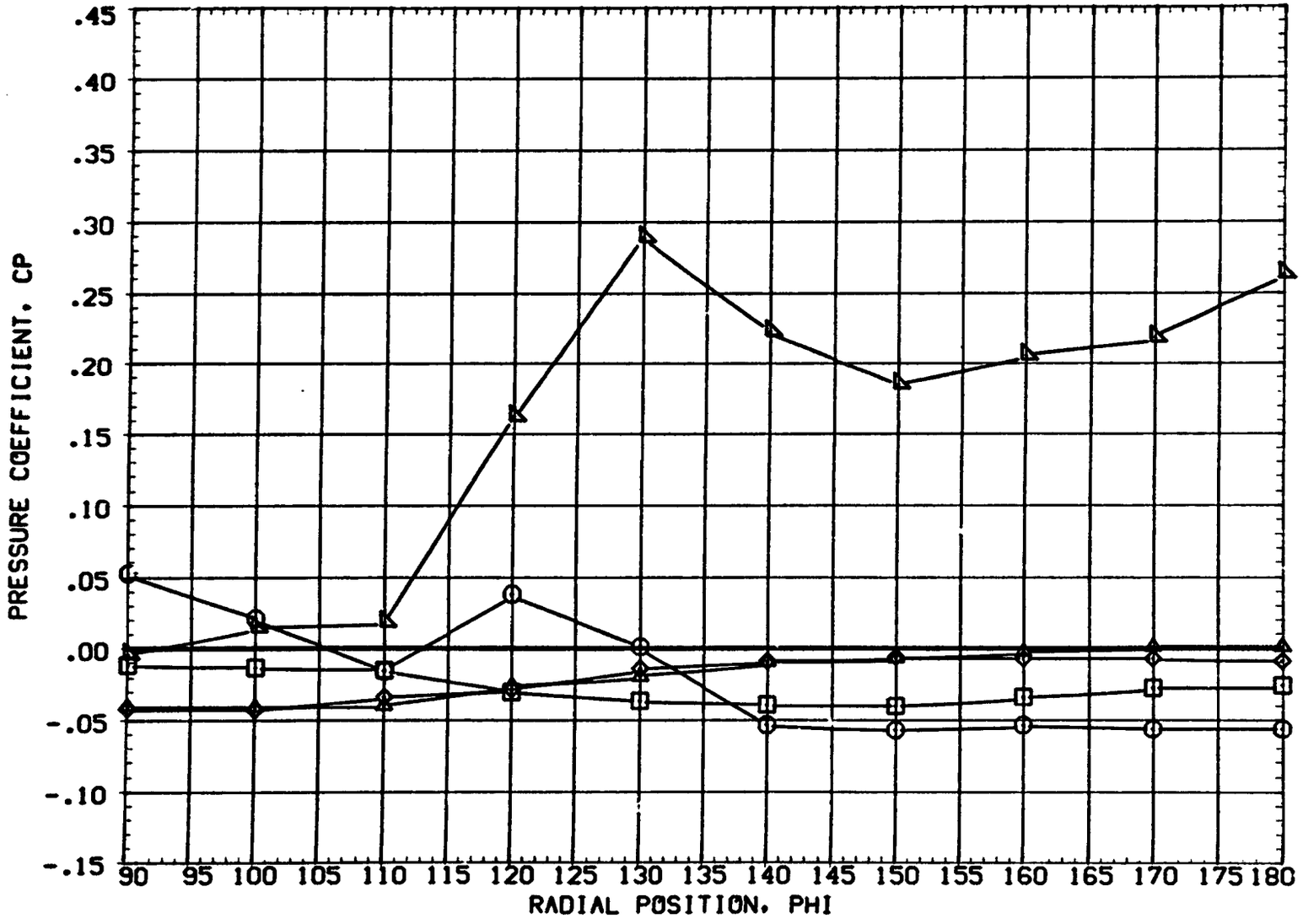
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
	.264	.010	2.950
	.405		
	.546		
	.688		
	.829		

PARAMETRIC VALUES

BETA .000 ELEVON .000



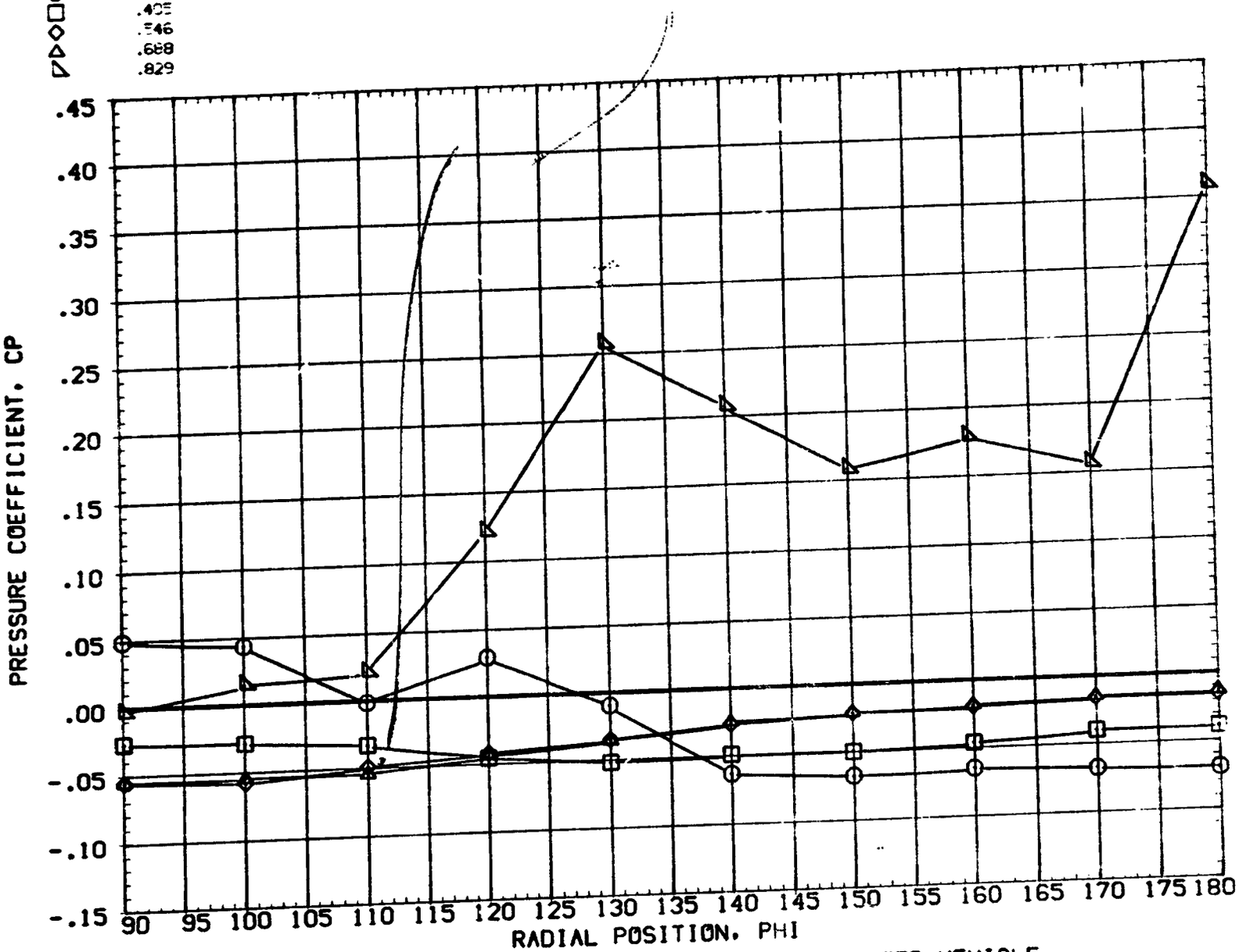
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION

PARAMETRIC VALUES

BETA .000 ELEVON .0°

SYMBOL	X/L	ALPHA	MACH
	.264	2.000	2.950
	.405		
	.546		
	.688		
	.829		



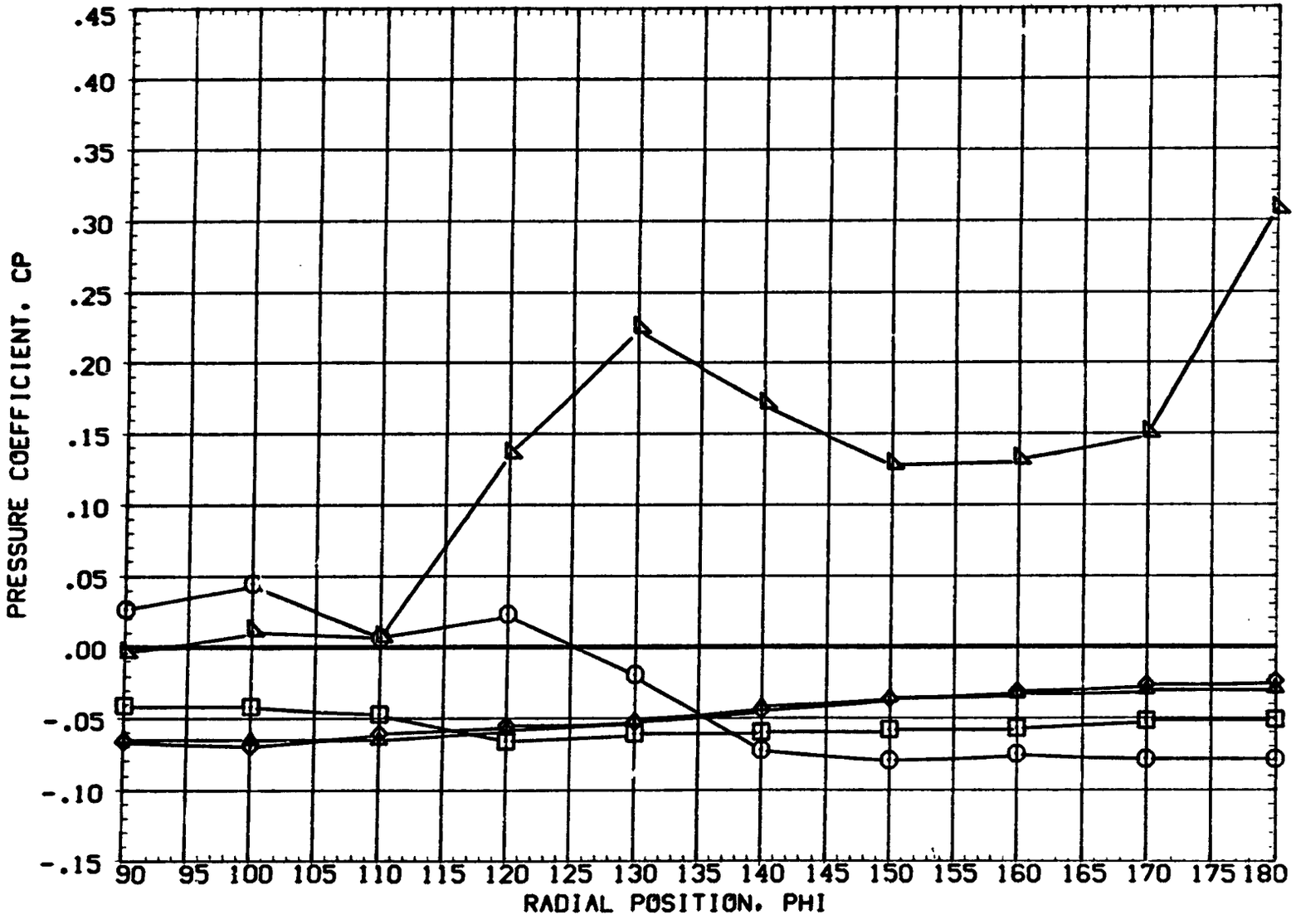
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
	.264	4.000	2.950
	.405		
	.546		
	.688		
	.829		

PARAMETRIC VALUES

BETA .000 ELEVON .00



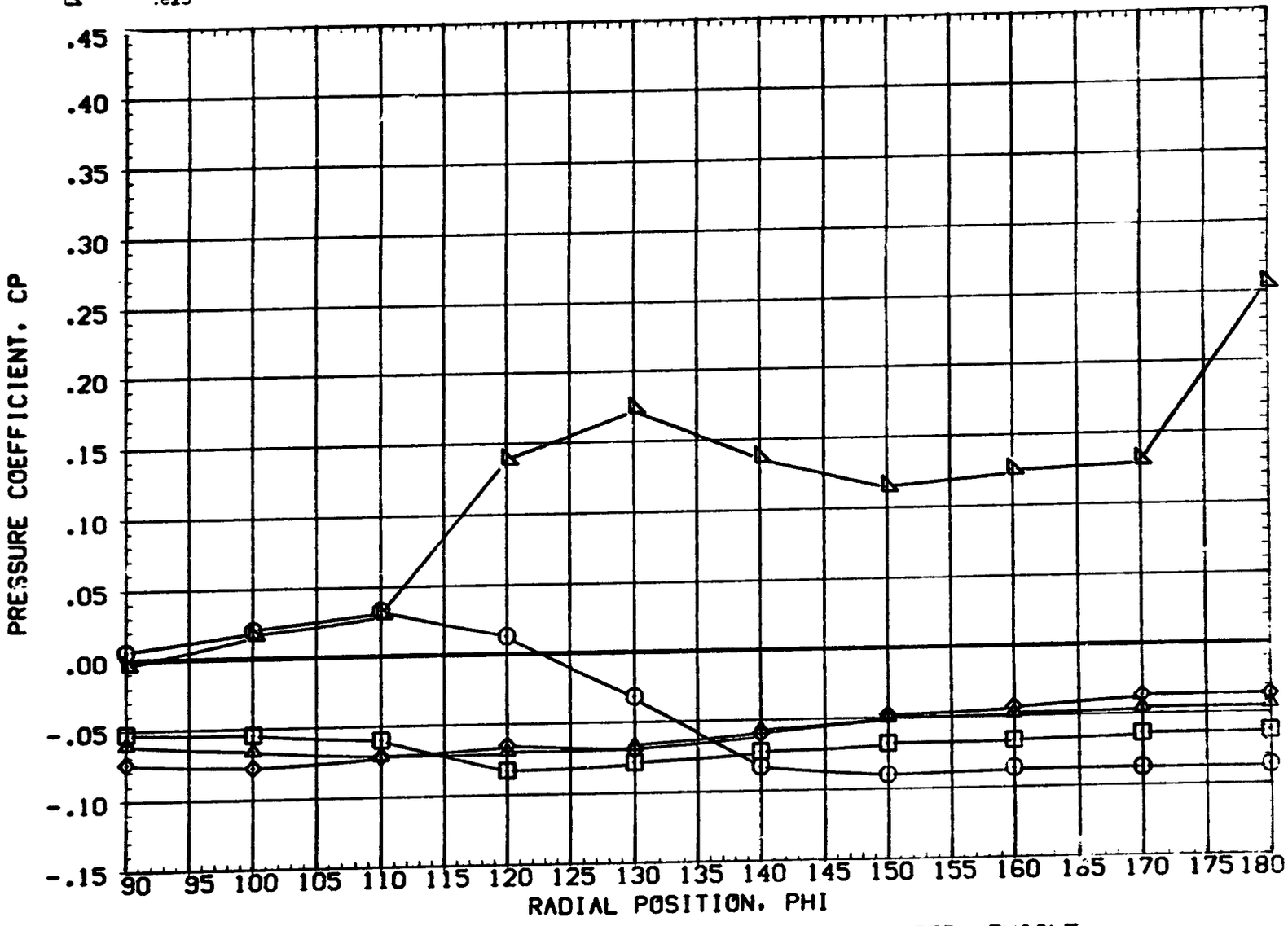
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
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	.405		
	.546		
	.688		
	.829		

PARAMETRIC VALUES

BETA .000 ELEVON .000



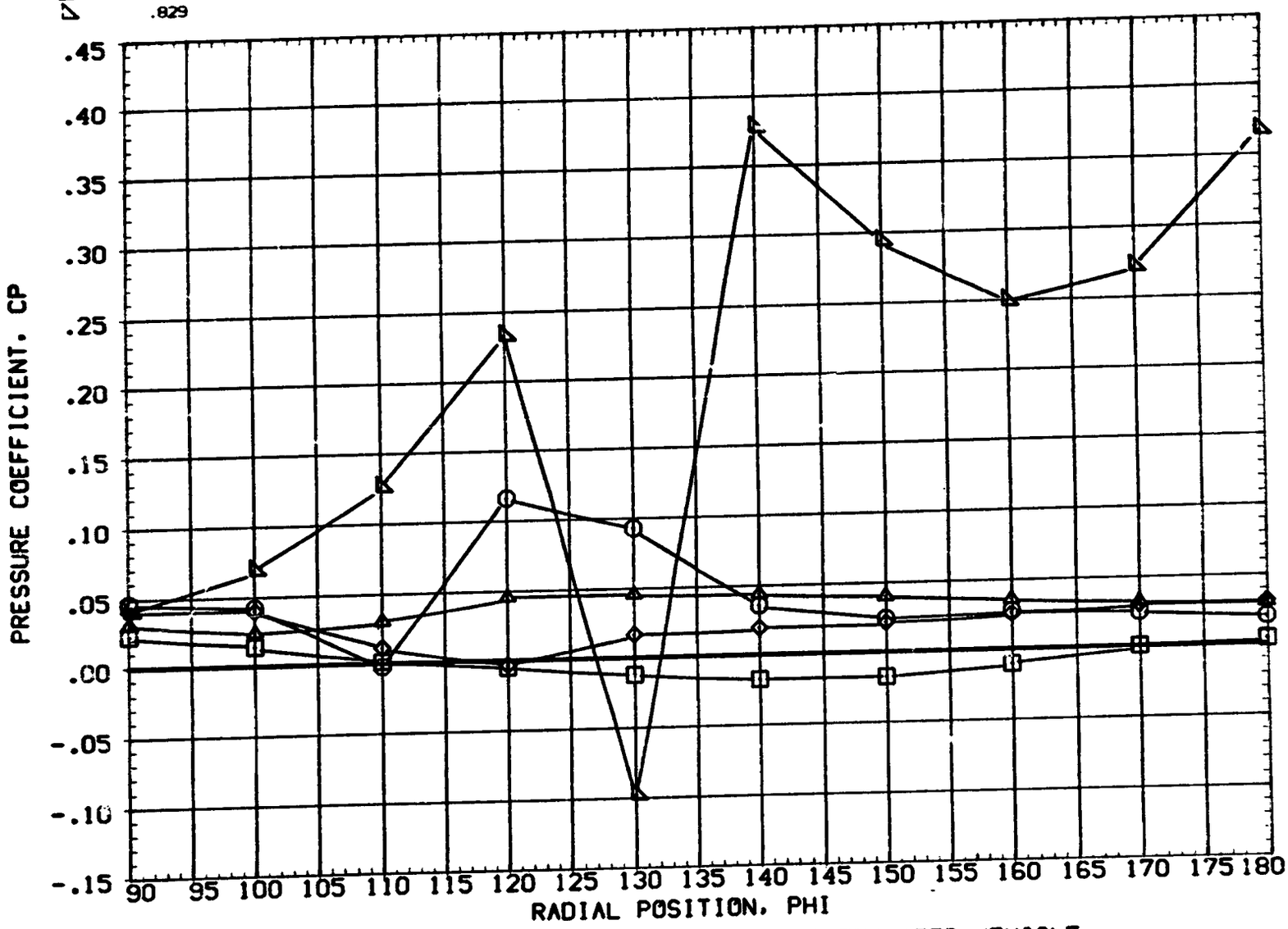
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

PARAMETRIC VALUES

BETA .000 ELEVON

SYMBOL	X/L	ALPHA	MACH
	.264	-6.000	4.000
	.405		
	.546		
	.688		
	.829		



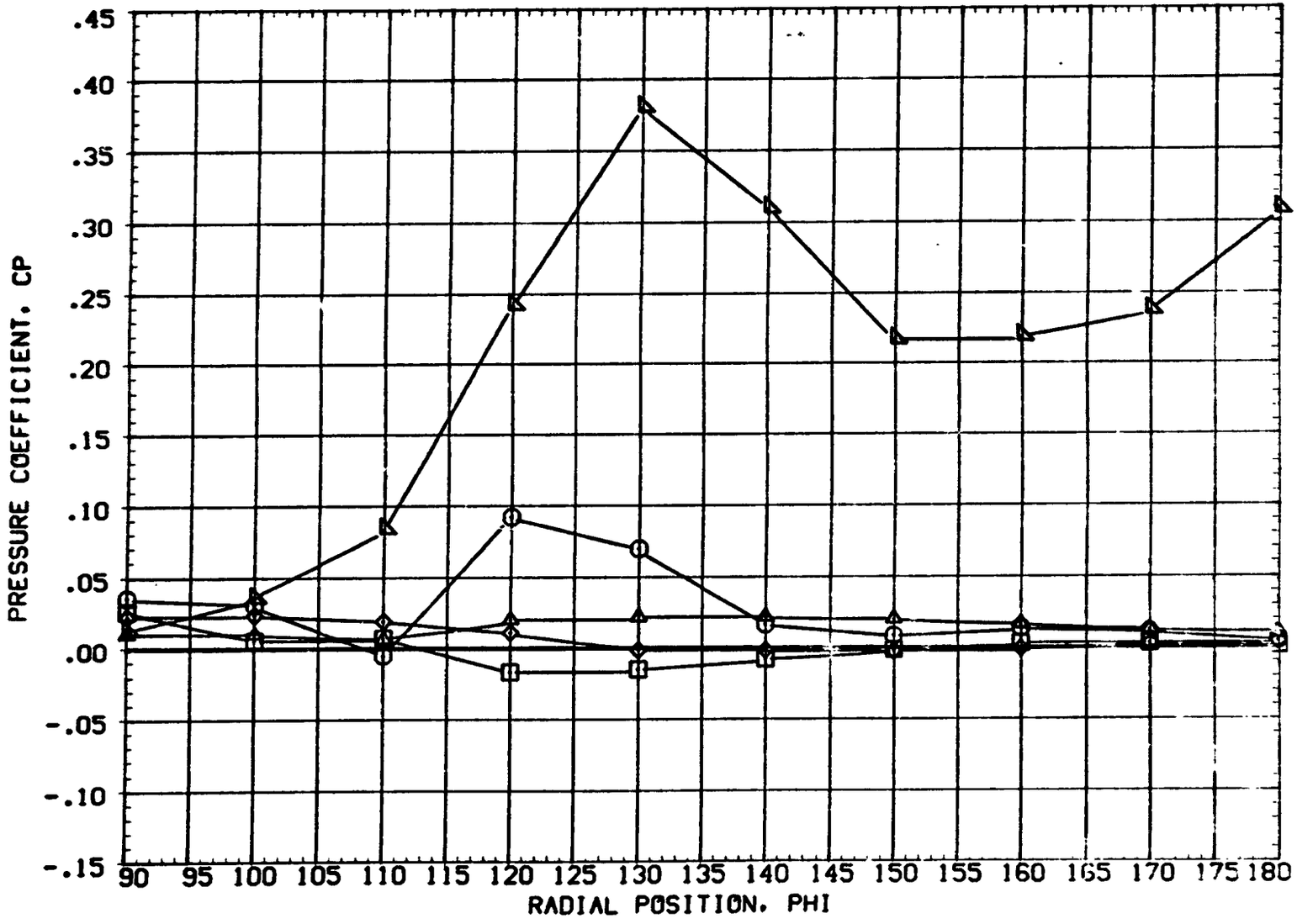
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
○	.264	-3.990	4.000
□	.405		
◇	.546		
△	.688		
▷	.829		

PARAMETRIC VALUES

BETA .000 ELEVON .000

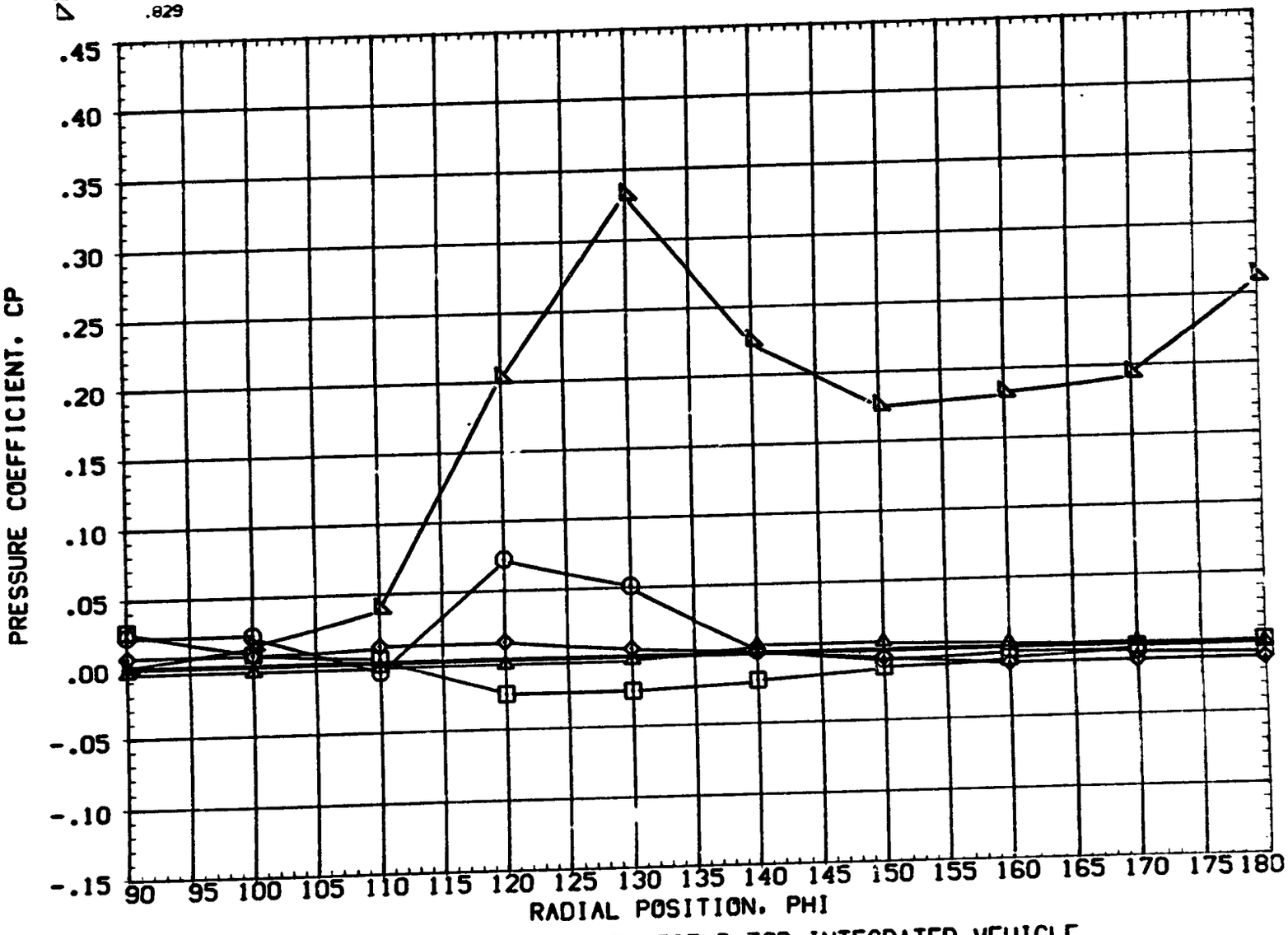


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

PARAMETRIC VALUES

SYMBOL	X/L	ALPHA	MACH	BETA	ELEVON
▽	.264	-2.000	4.000	.000	.000
▷	.405				
◇	.546				
□	.688				
△	.829				



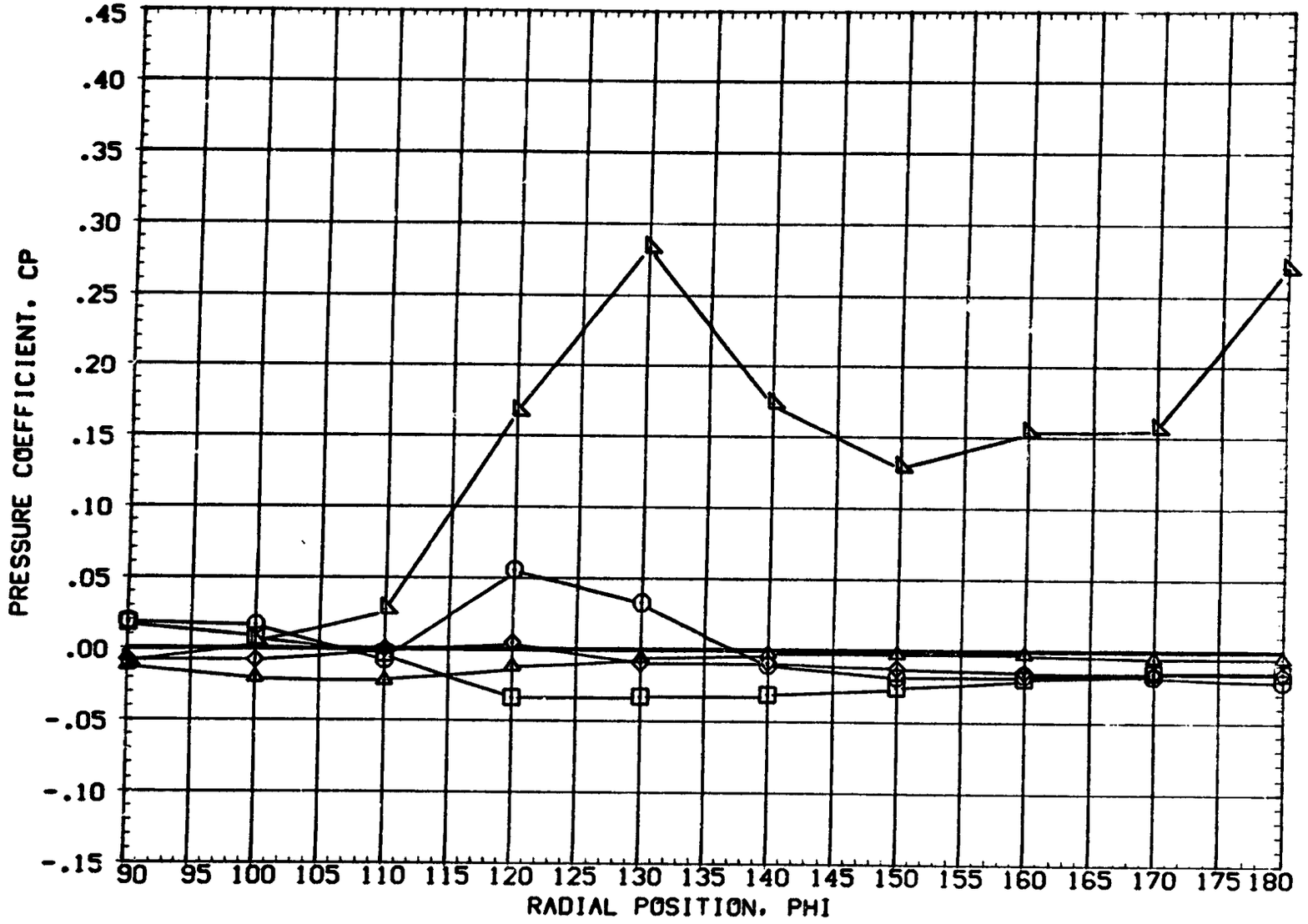
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
	.264	.010	4.000
□	.405		
◇	.546		
△	.688		
▷	.829		

PARAMETRIC VALUES

BETA .000 ELEVON .000



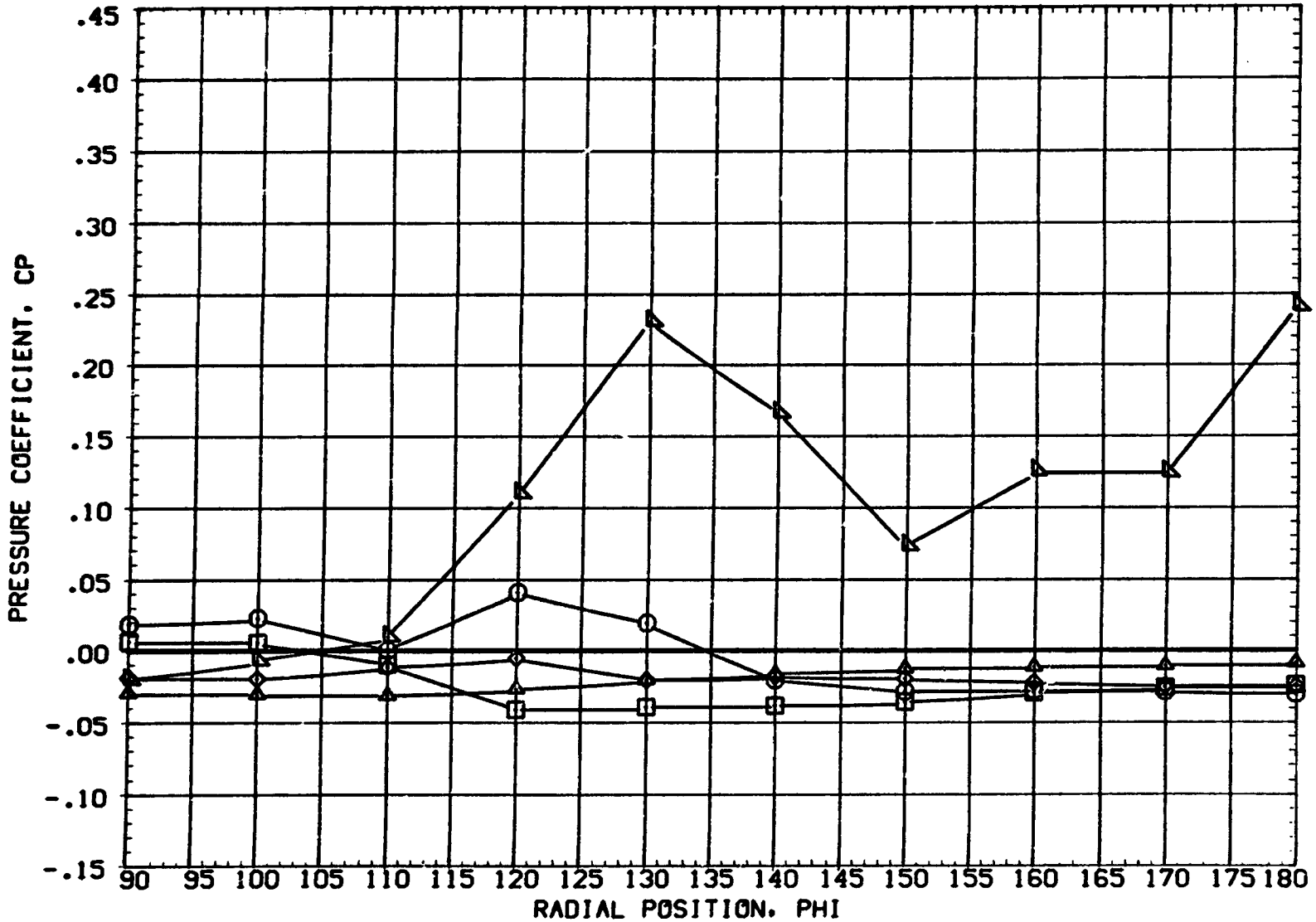
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
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	.405		
	.546		
	.698		
	.829		

PARAMETRIC VALUES

BETA .000 ELEVON .000



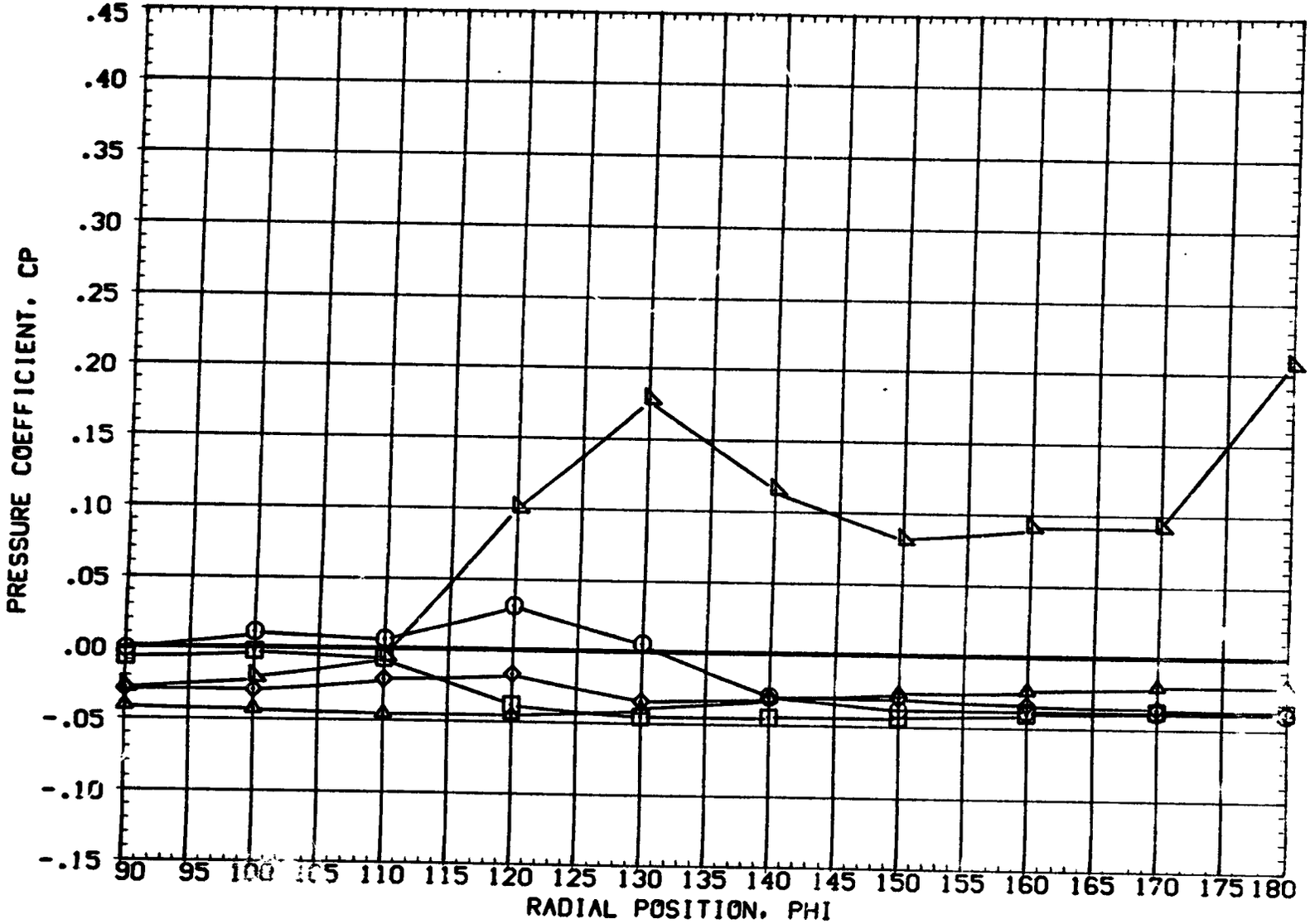
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
○	.264	4.000	4.000
□	.405		
◇	.546		
▷	.688		
△	.829		

PARAMETRIC VALUES

BETA .000 ELEVON .000



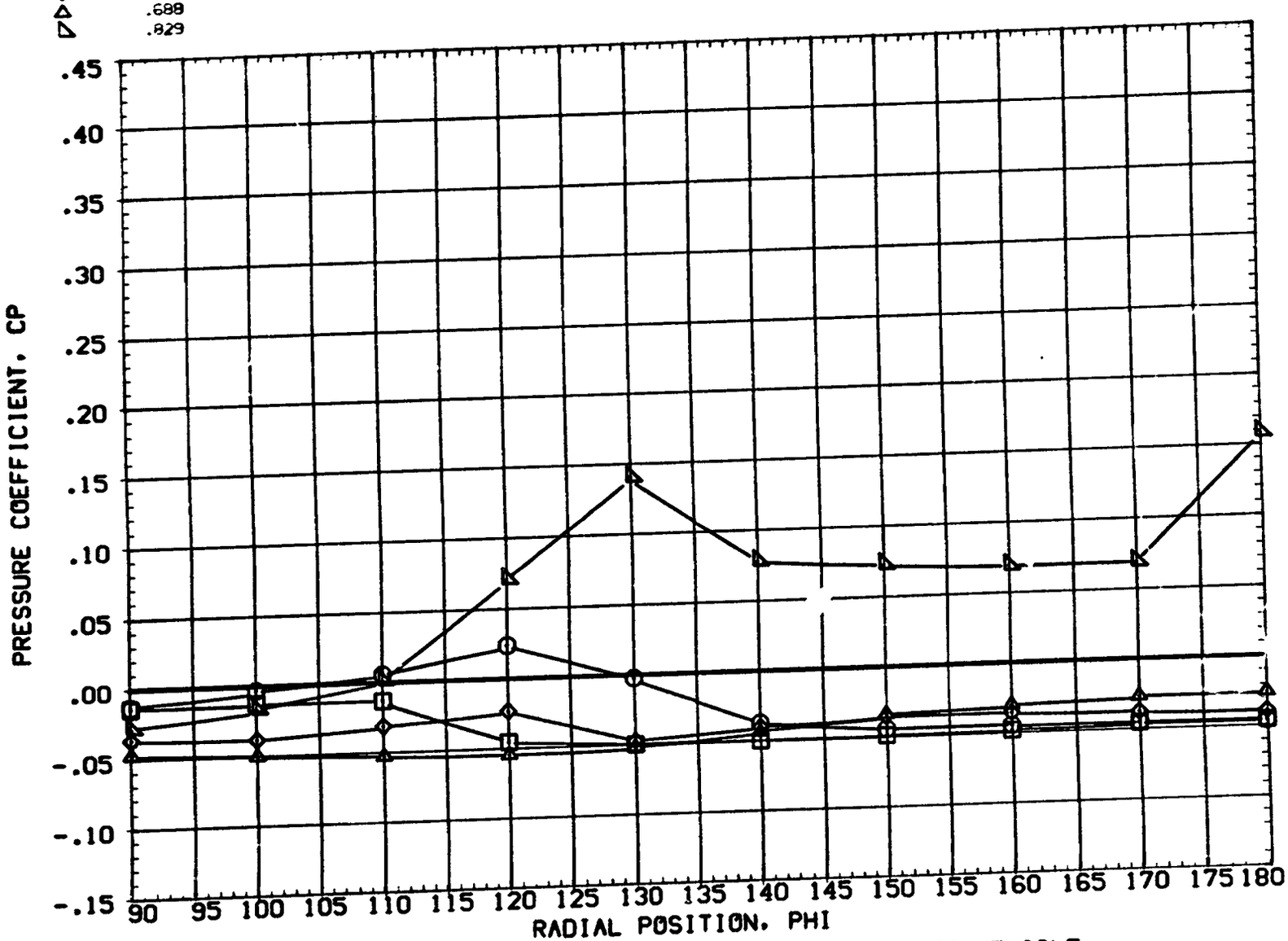
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

PARAMETRIC VALUES

BETA .000 ELEVON .000

SYMBOL	X/L	ALPHA	MACH
	.264	6.010	4.000
	.405		
	.546		
	.688		
	.829		



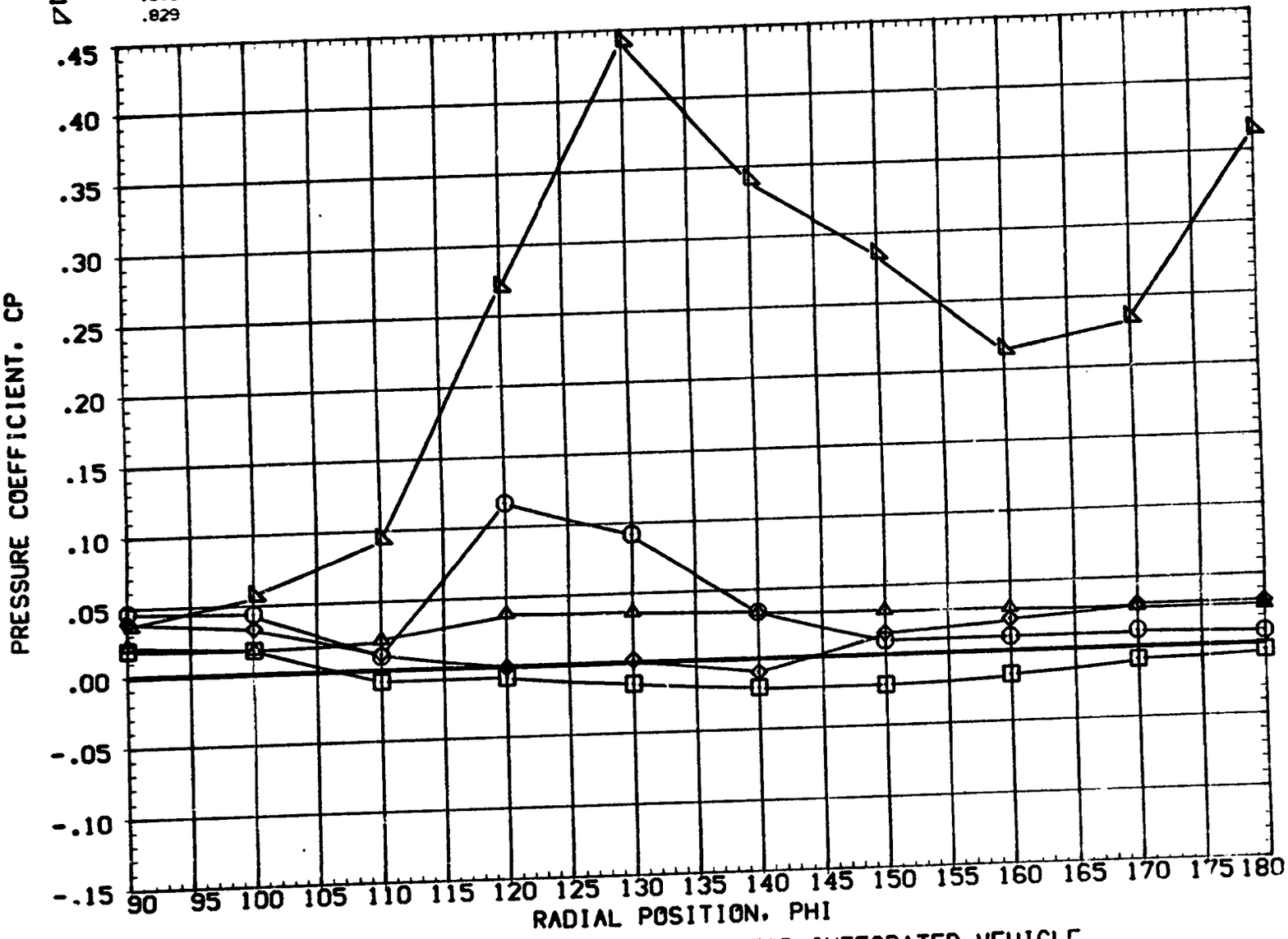
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

PARAMETRIC VALUES

BETA .000 ELEVON .000

SYMBOL	X/L	ALPHA	MACH
▽	.264	-6.000	4.500
△	.405		
◇	.546		
□	.688		
○	.829		



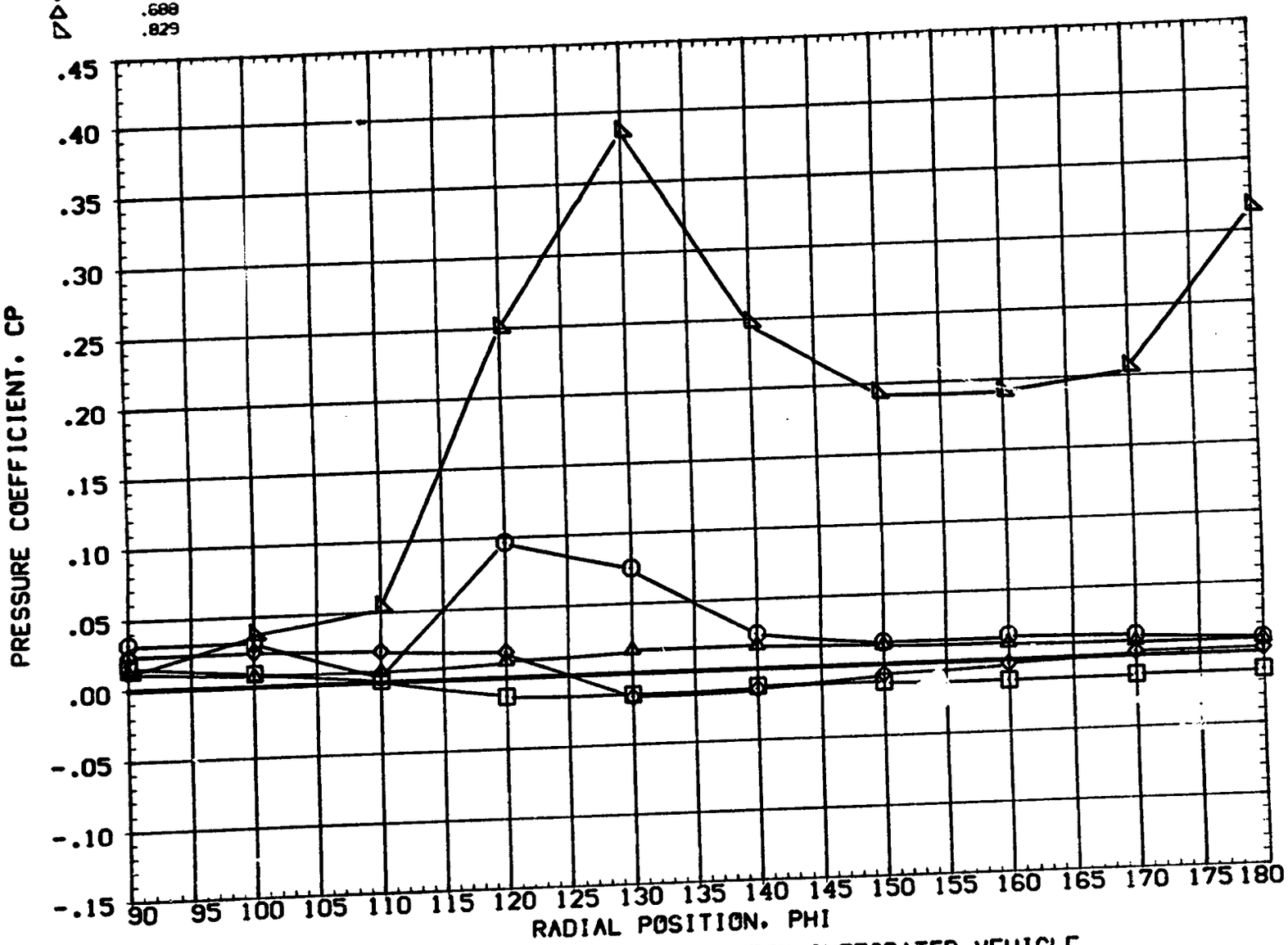
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

1A35 ORBITER ASCENT CONFIGURATION

PARAMETRIC VALUES

BETA .000 ELEVON .000

SYMBOL	X/L	ALPHA	MACH
	.264	-3.990	4.500
	.405		
	.546		
	.688		
	.829		

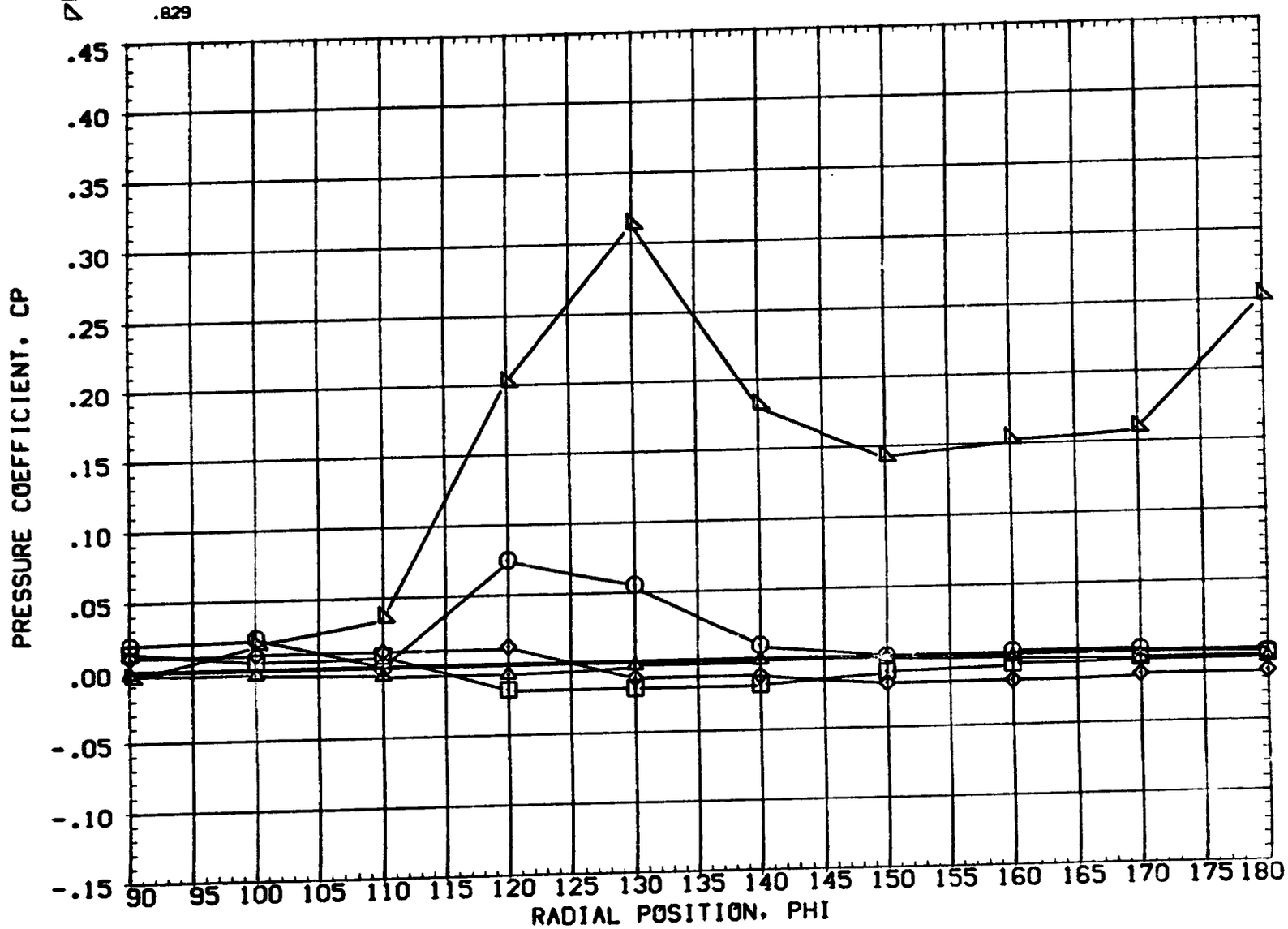


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

PARAMETRIC VALLES

SYMBOL	X/L	ALPHA	MACH	BETA	.000	ELEVON	.000
	.264	-2.000	4.500				
	.405						
	.546						
	.688						
	.829						



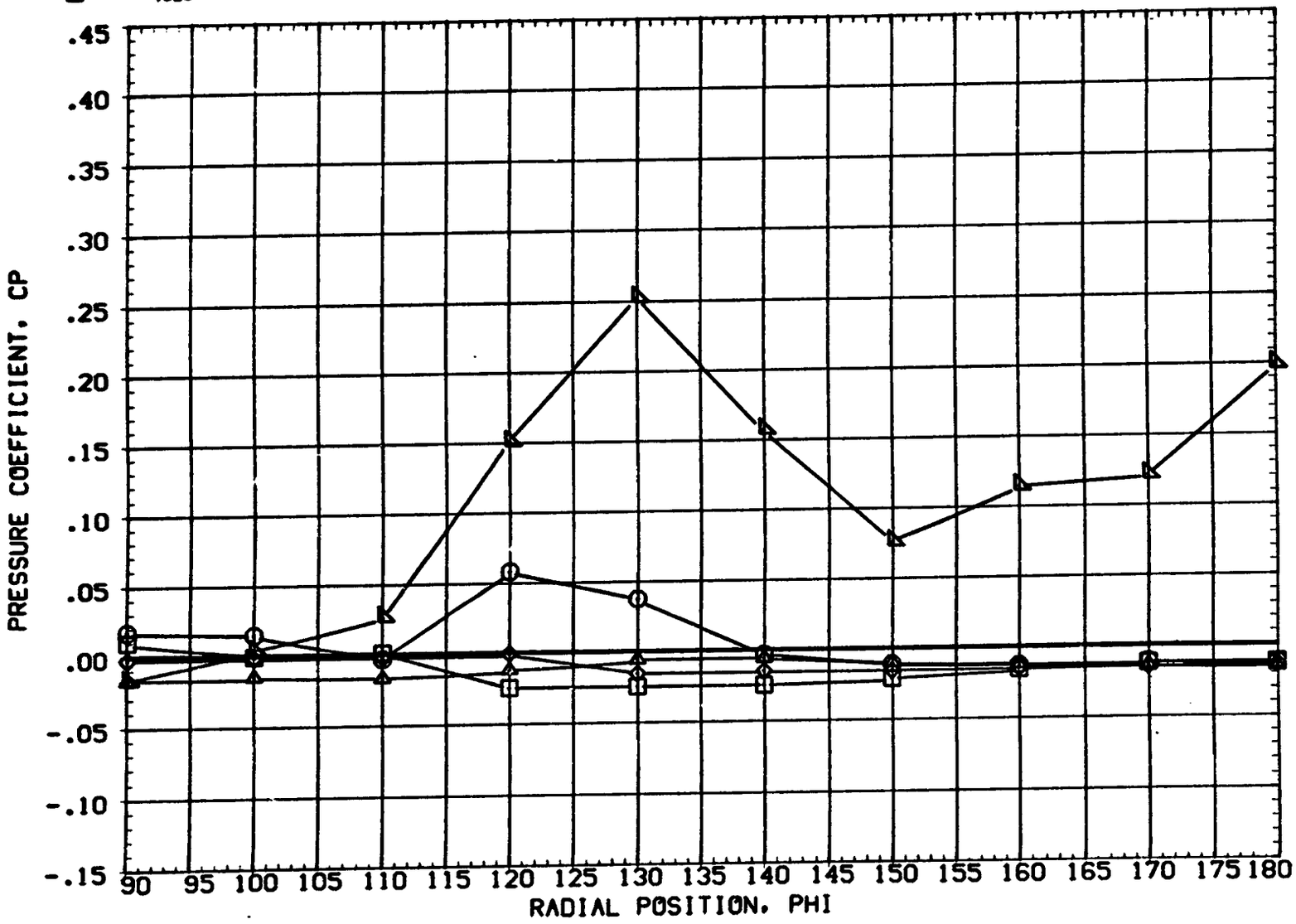
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
○	.264	.000	4.500
□	.405		
◇	.546		
△	.688		
◁	.829		

PARAMETRIC VALUES

BETA .000 ELEVON .000

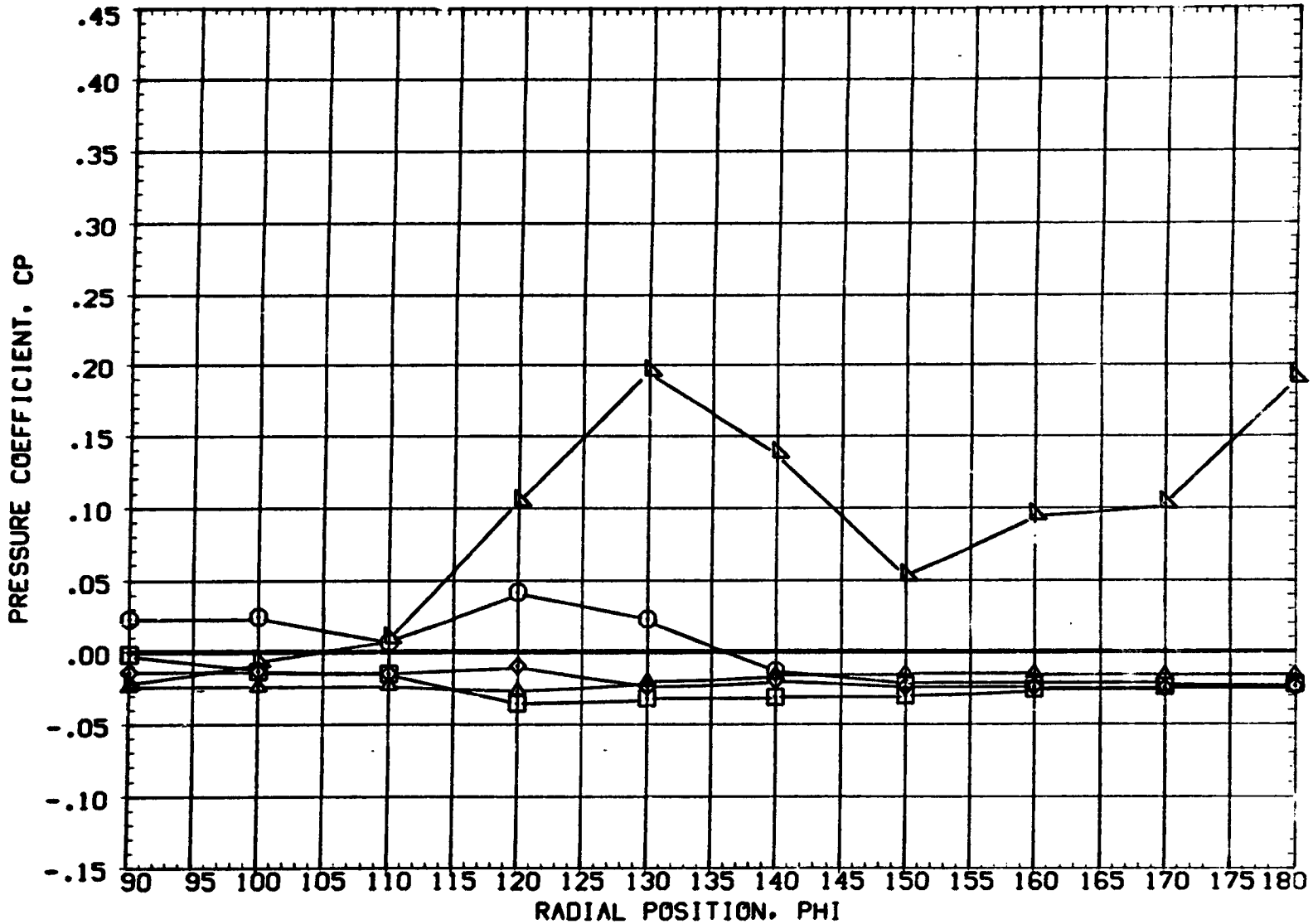


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
○	.264	1.990	4.500
△	.405		
◇	.546		
□	.688		
▽	.829		

PARAMETRIC VALUES
BETA .000 ELEVON .000



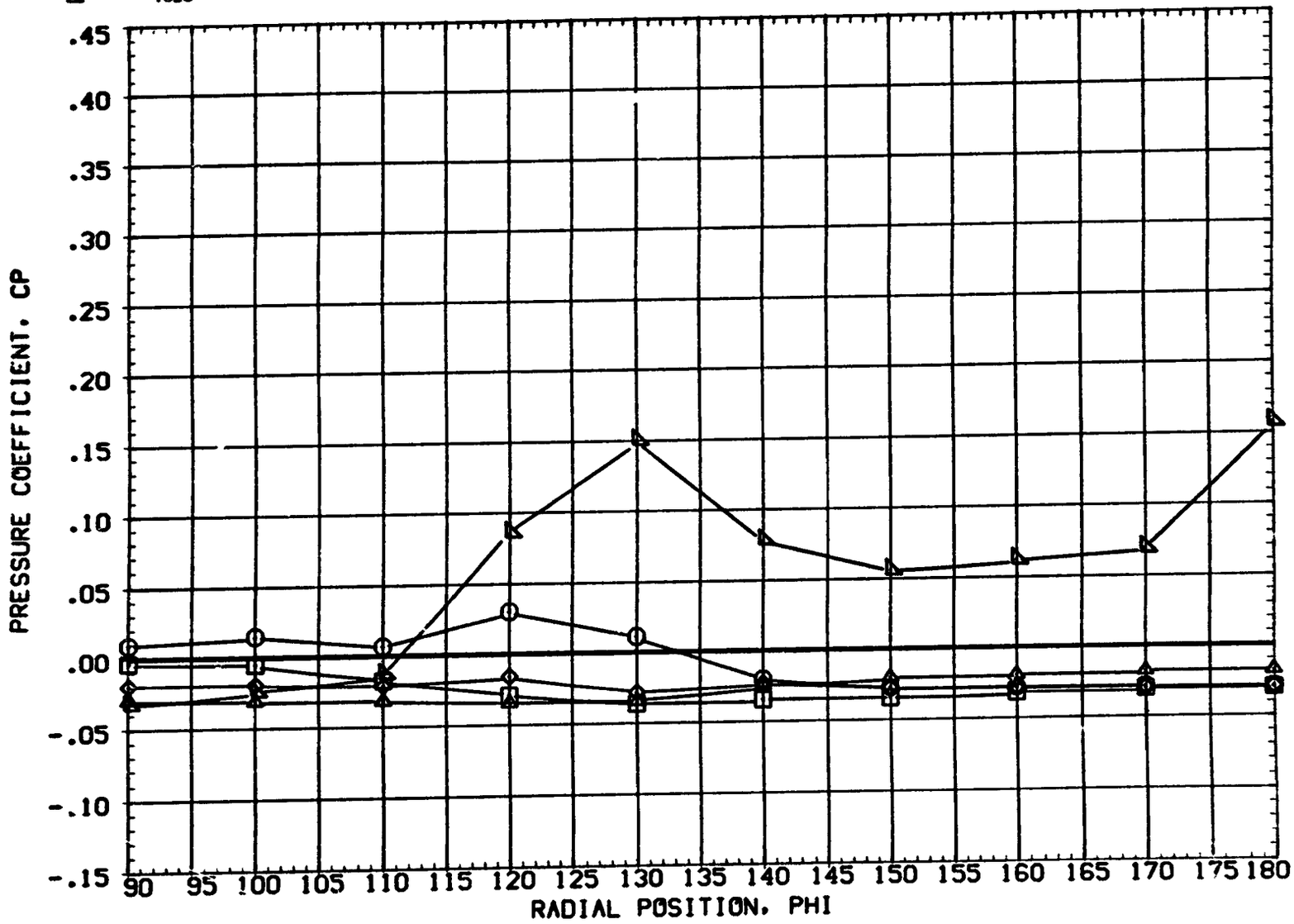
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
	.264	4.010	4.500
	.405		
	.546		
	.688		
	.829		

PARAMETRIC VALUES

BETA .000 ELEVON .000

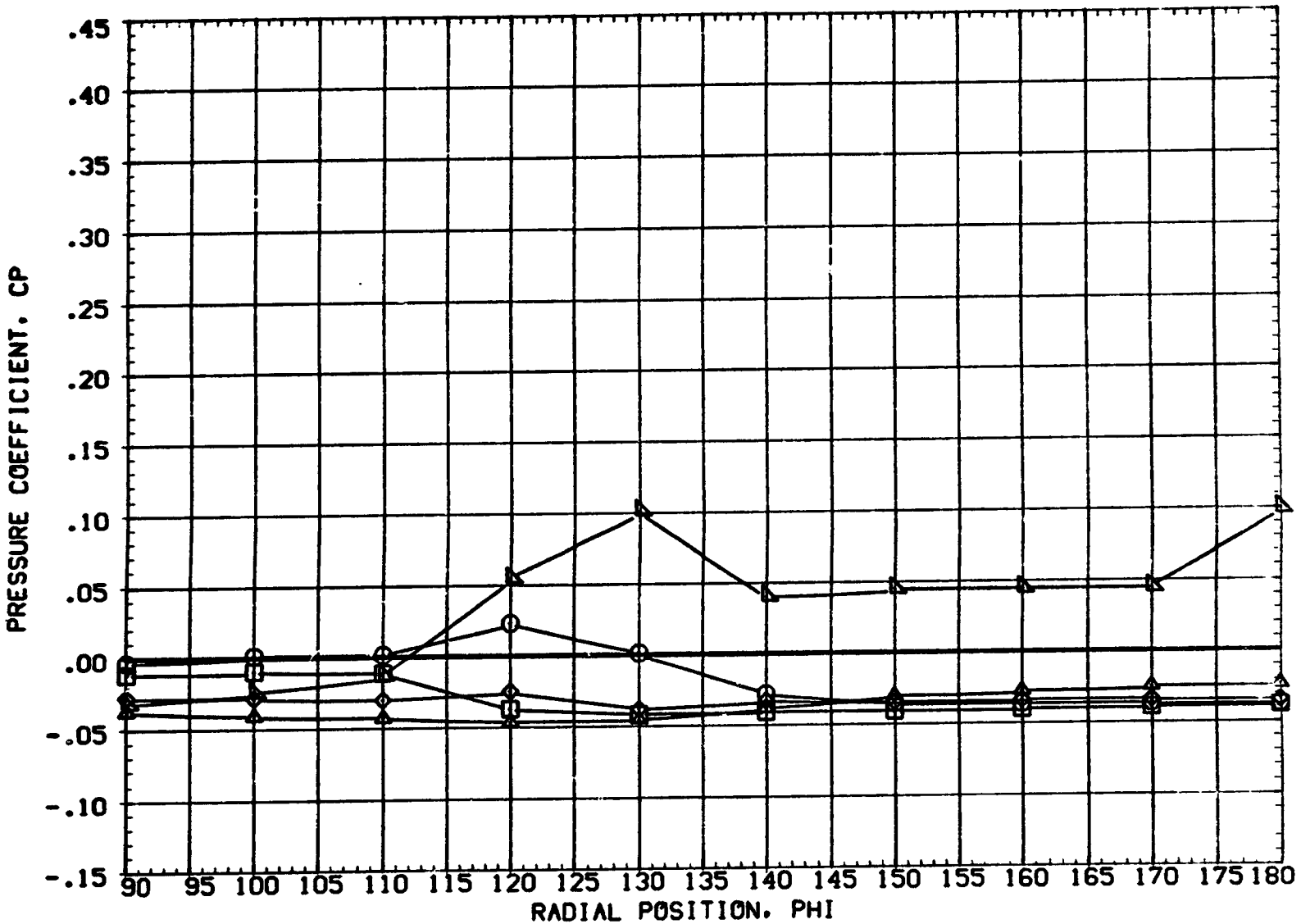


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE

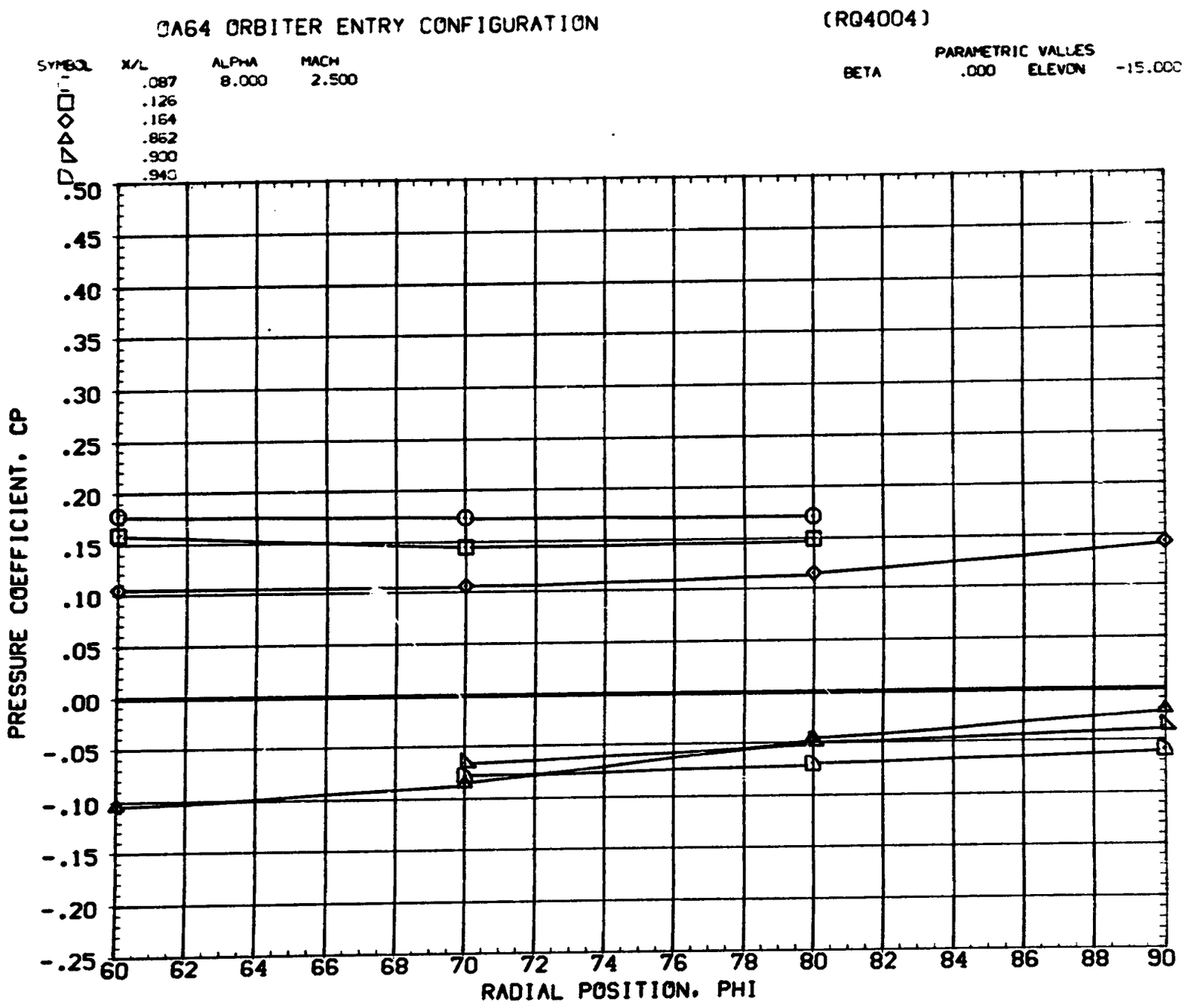
IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

SYMBOL	X/L	ALPHA	MACH
○	.264	6.000	4.500
□	.405		
◇	.546		
△	.688		
▷	.829		

PARAMETRIC VALUES
BETA .000 ELEVON .000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR INTEGRATED VEHICLE



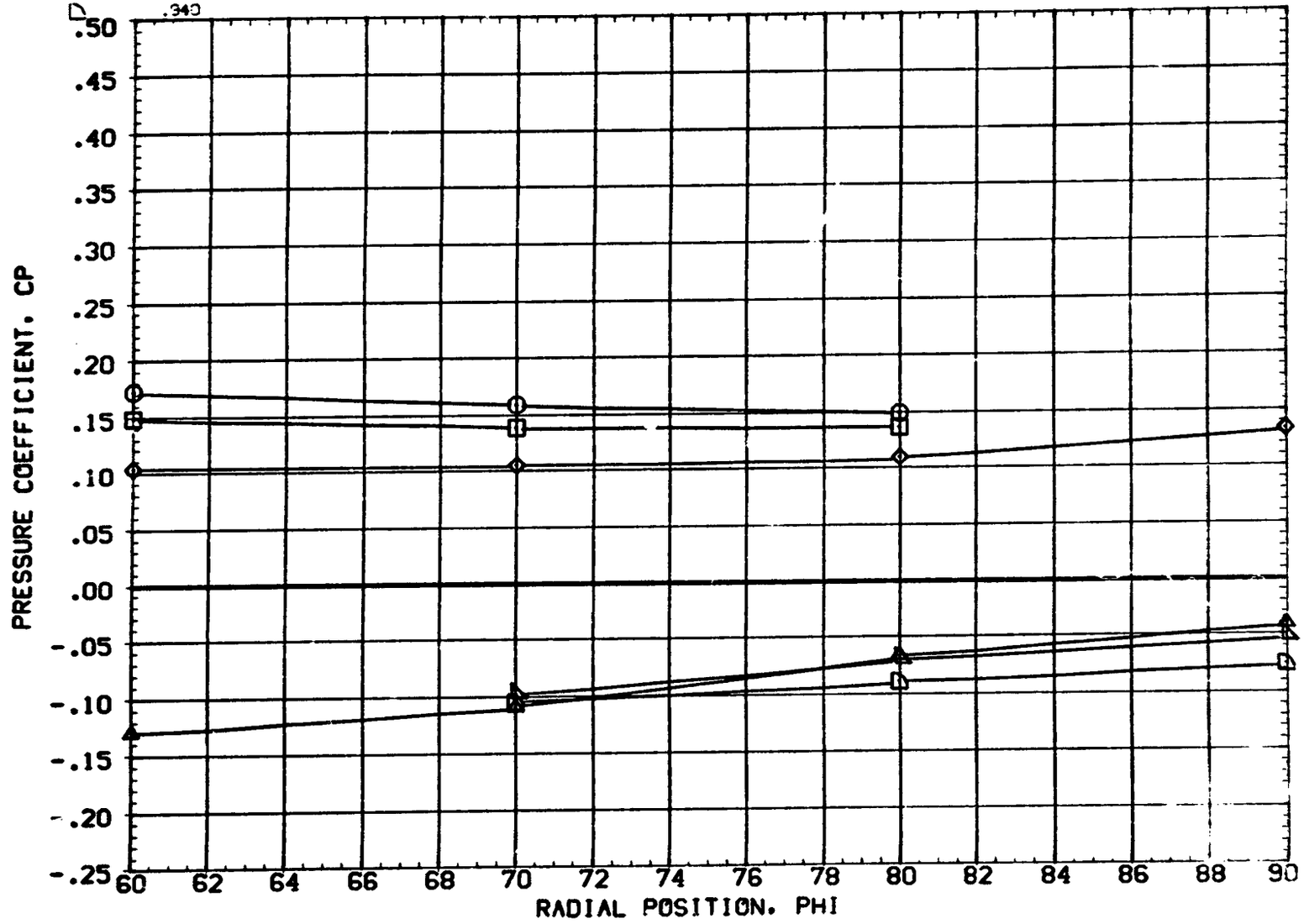
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

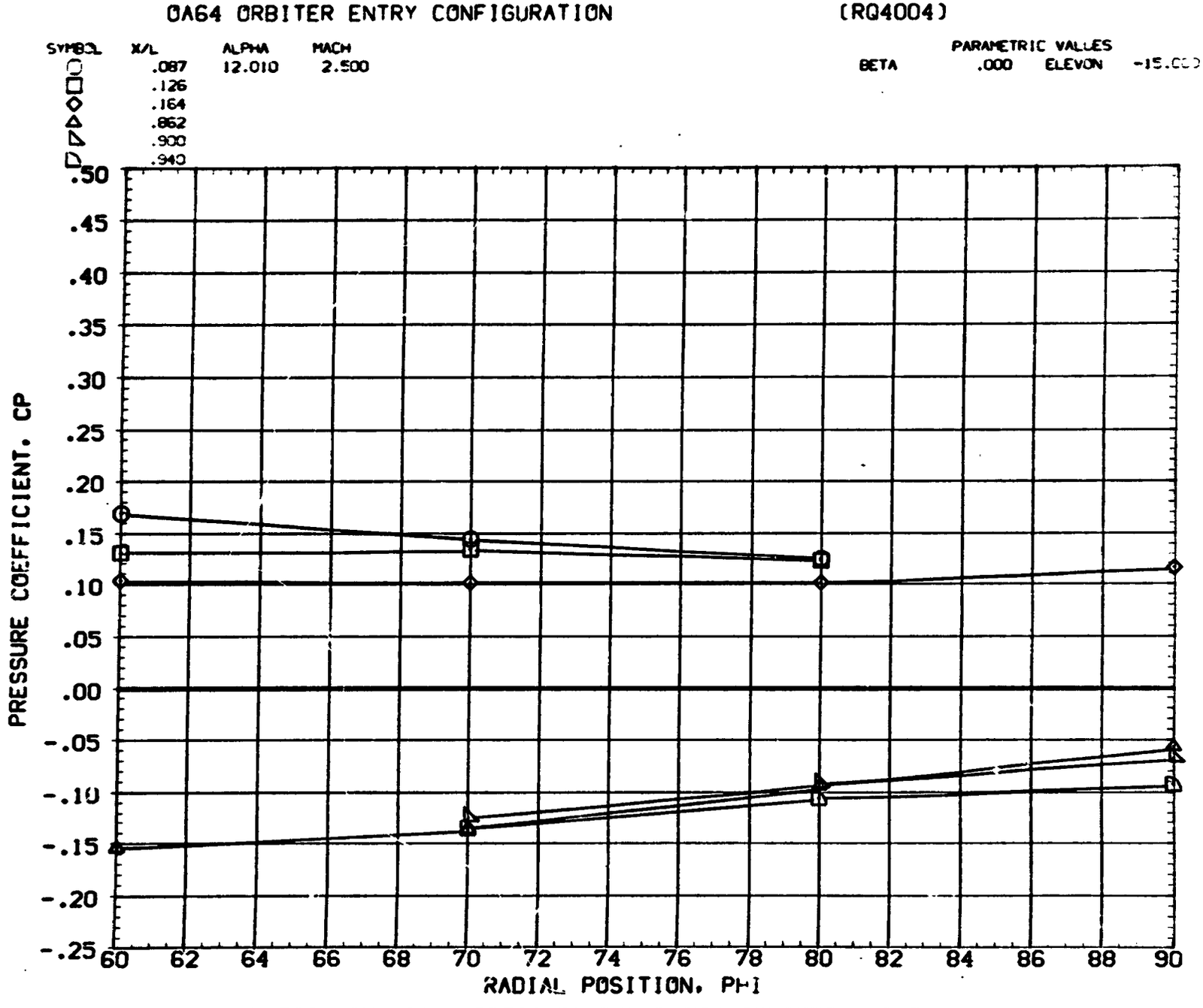
PARAMETRIC VALUES

BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
	.087	10.000	2.500
	.126		
	.164		
	.862		
	.900		
	.940		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



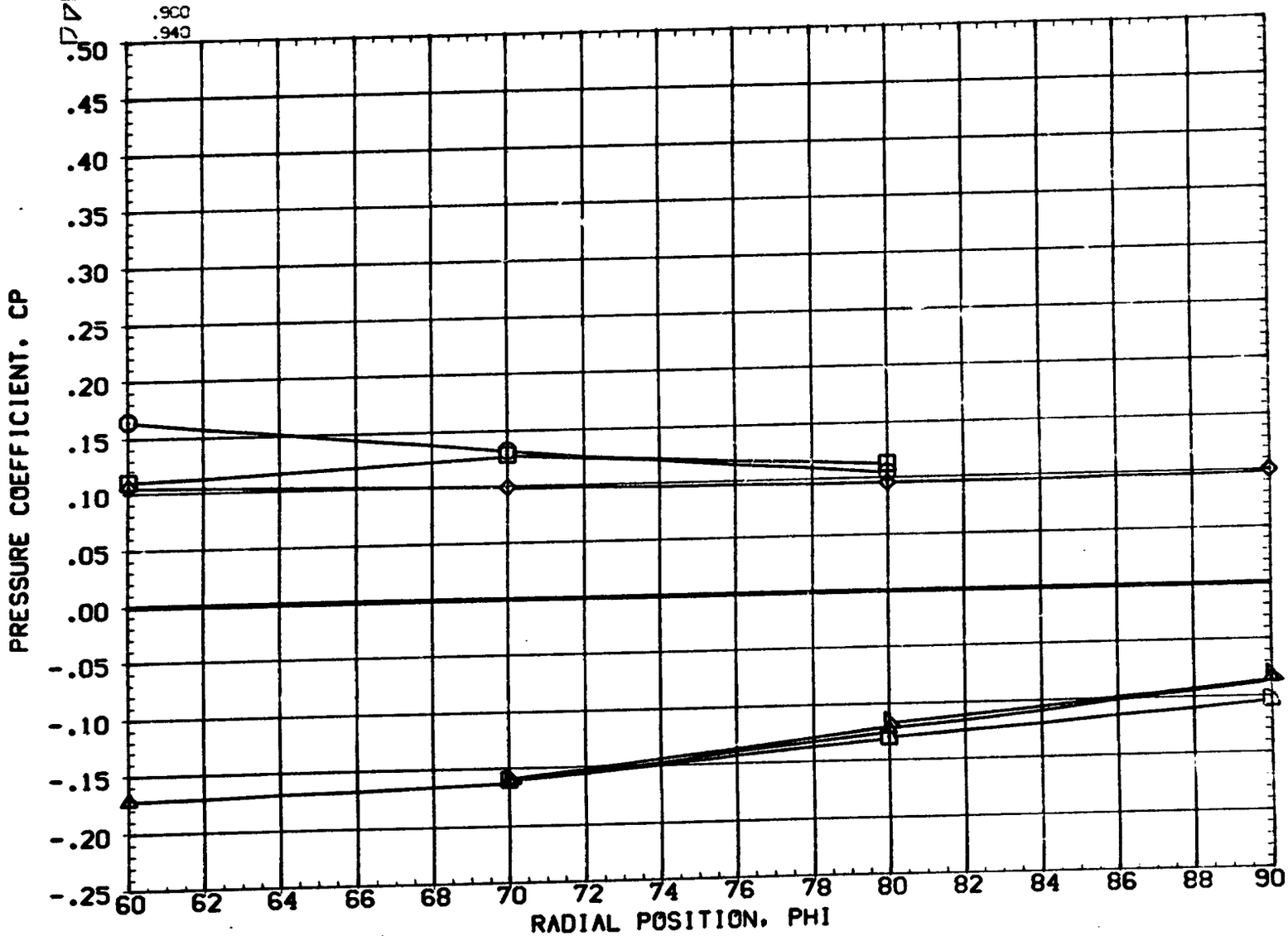
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

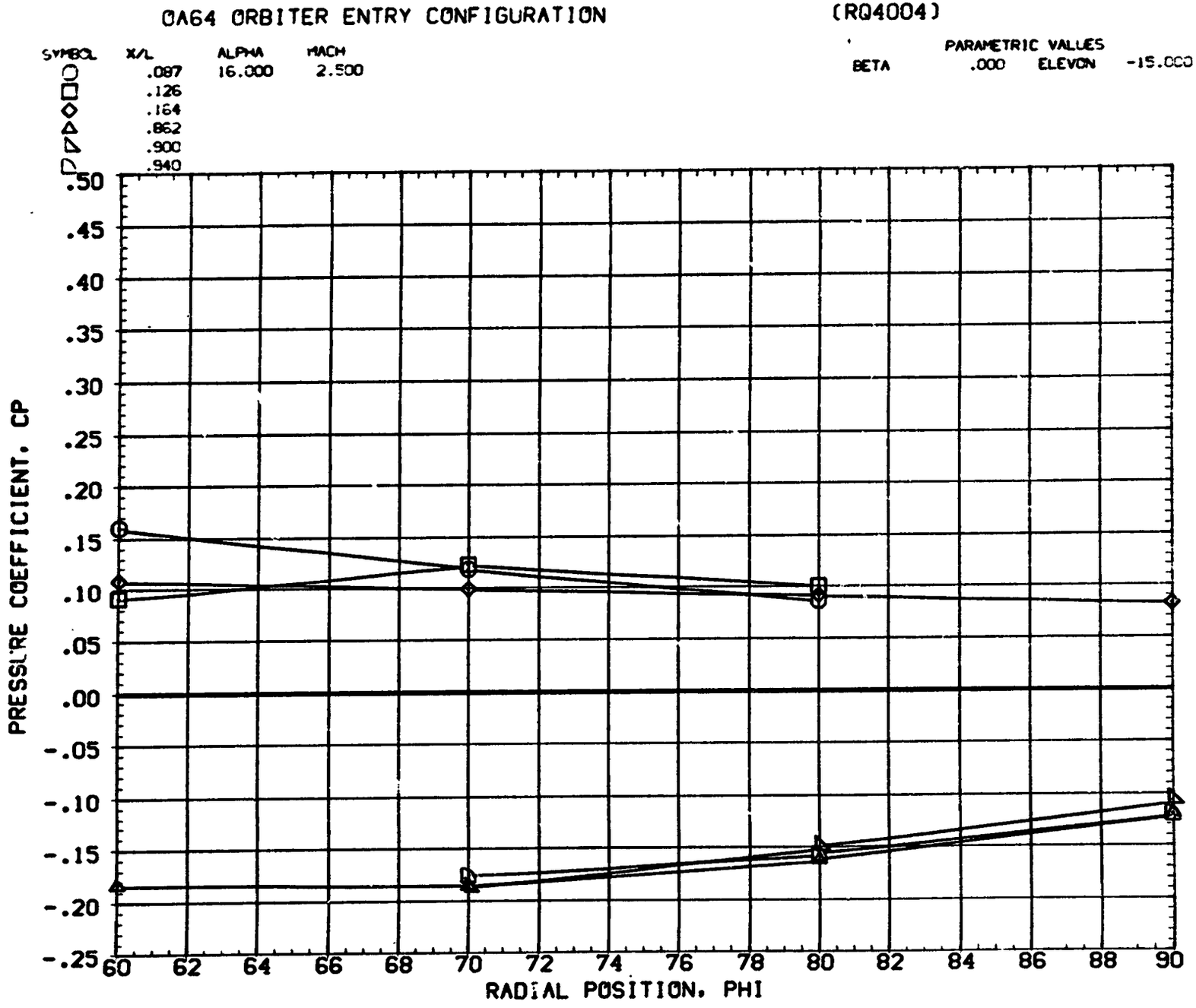
PARAMETRIC VALUES

BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
	.087	14.000	2.500
	.126		
	.164		
	.862		
	.900		
	.940		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



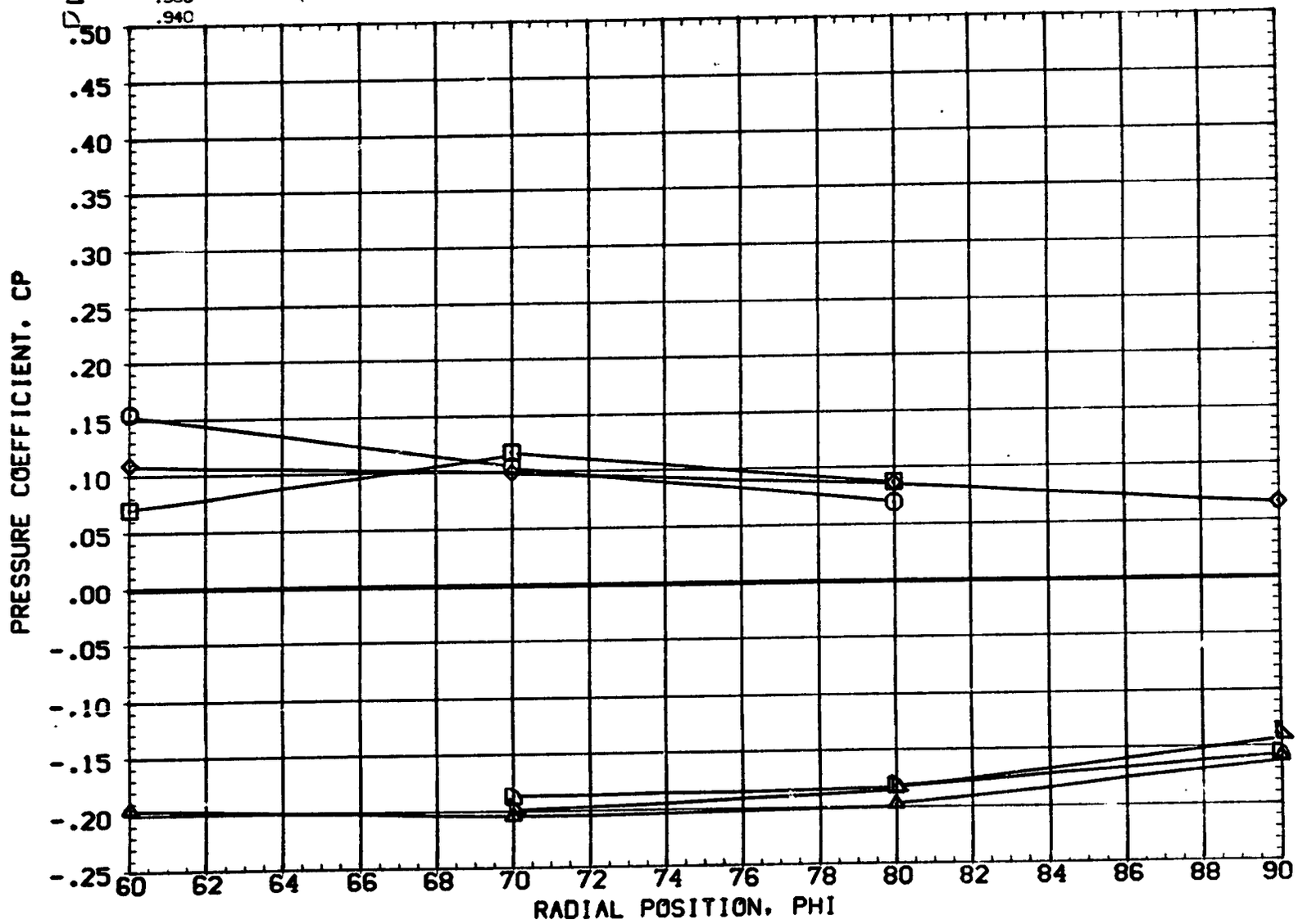
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

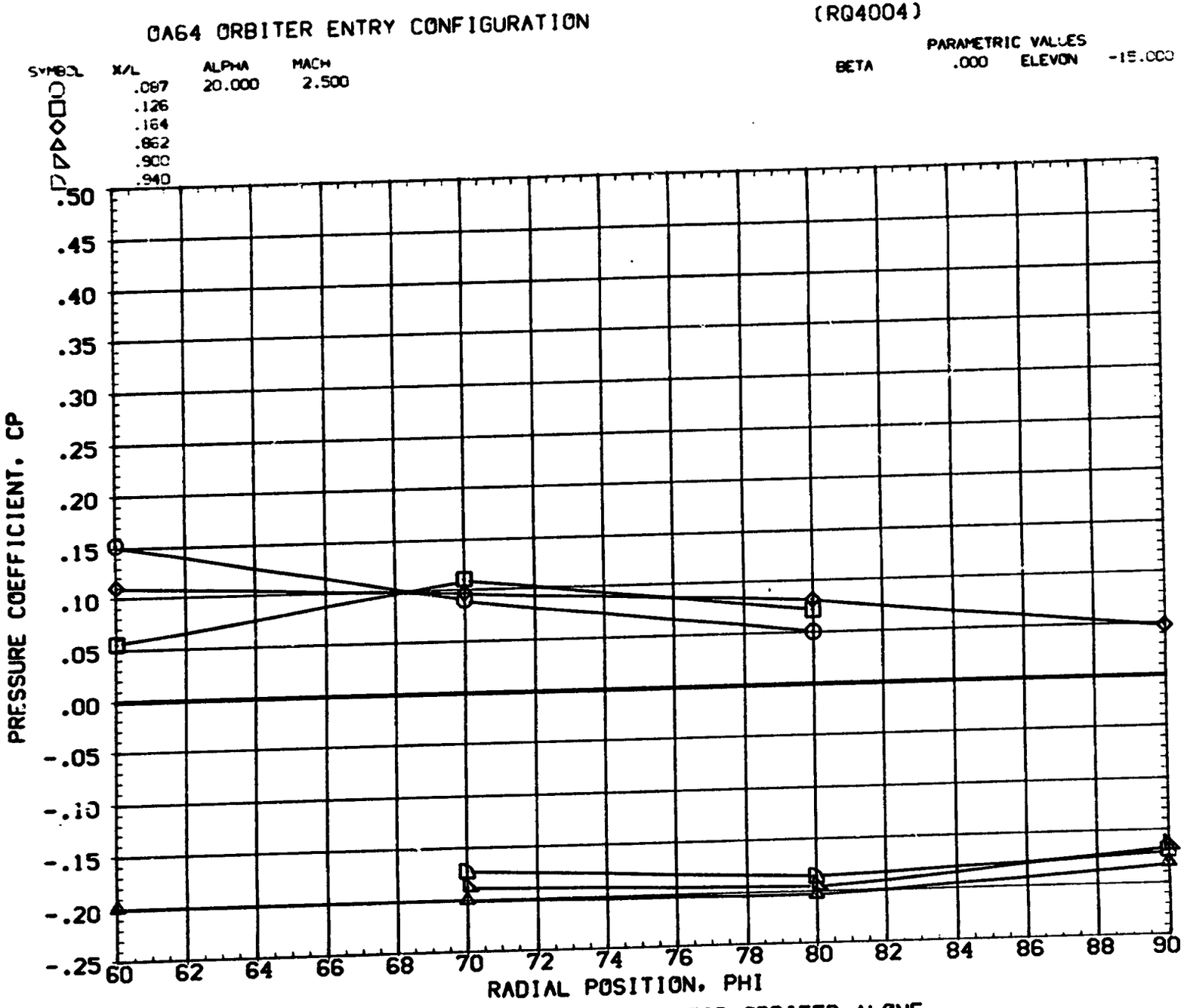
PARAMETRIC VALUES

BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
	.087	18.000	2.500
	.126		
	.164		
	.862		
	.900		
	.940		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

SYMBOL X/L ALPHA MACH

.087 20.980 2.500

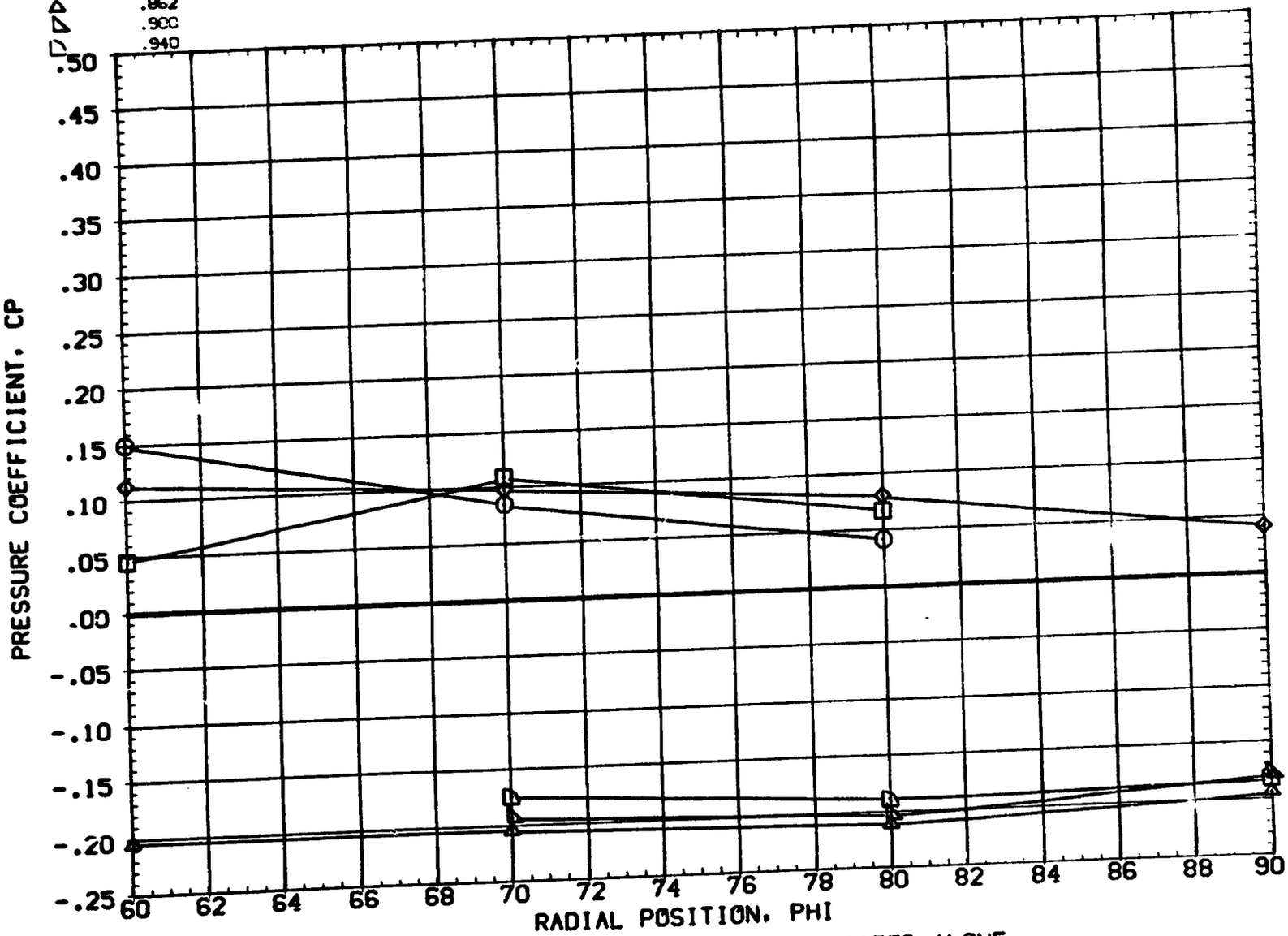
.126

.164

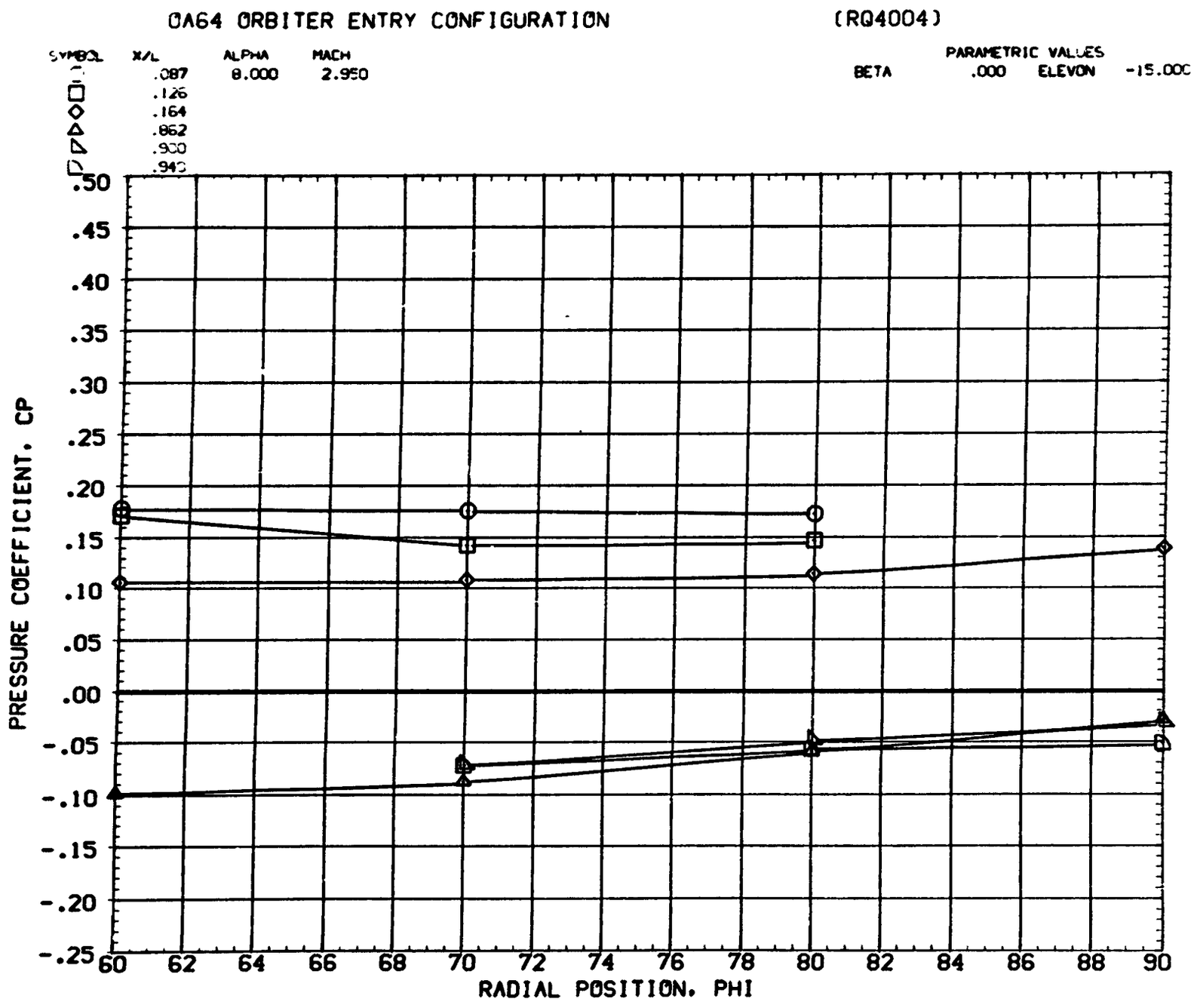
.862

.900

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RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

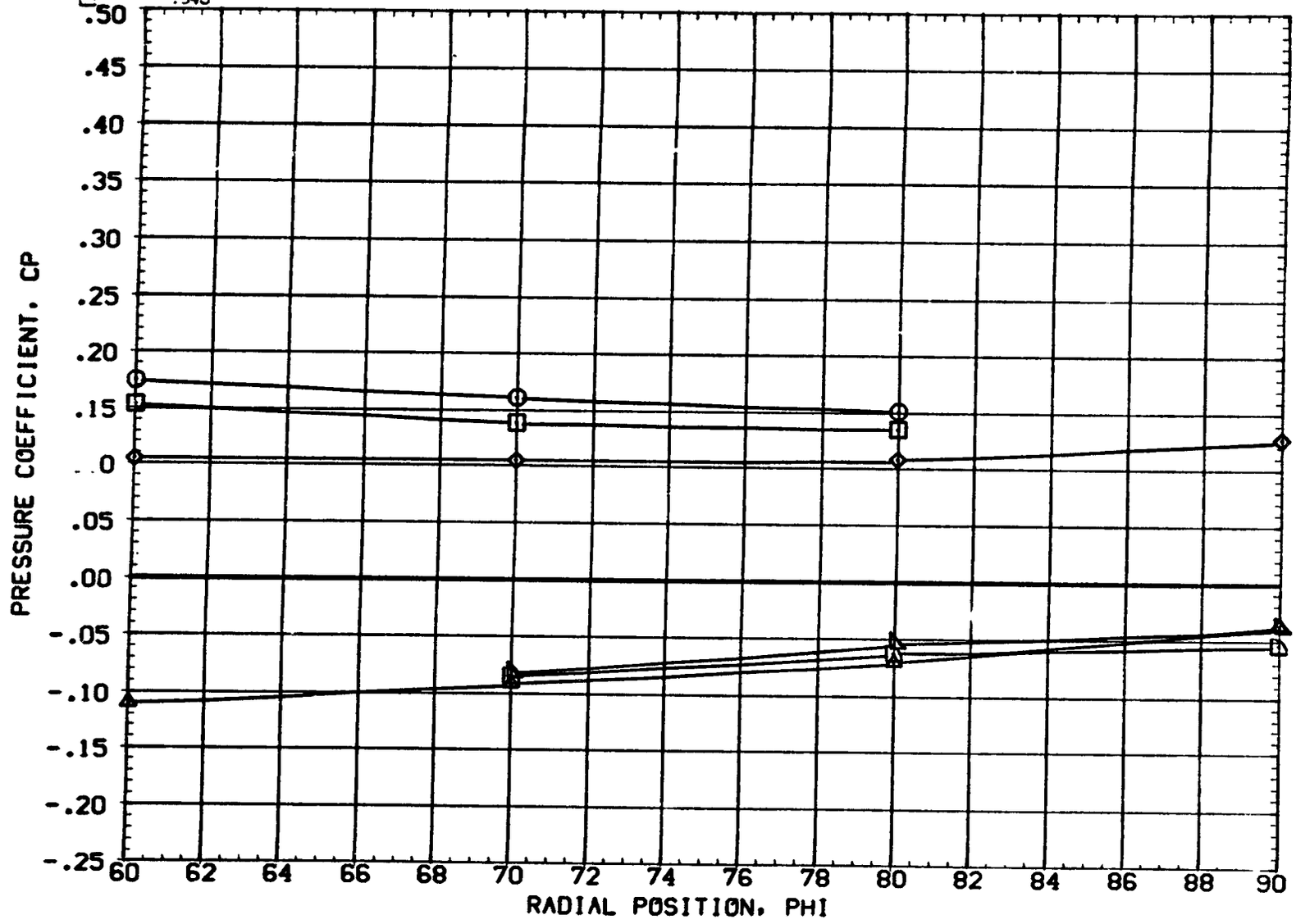


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
○	.097	10.000	2.950
□	.126		
◇	.164		
△	.862		
▽	.900		
◁	.940		

PARAMETRIC VALUES
BETA .000 ELEVON -15.000



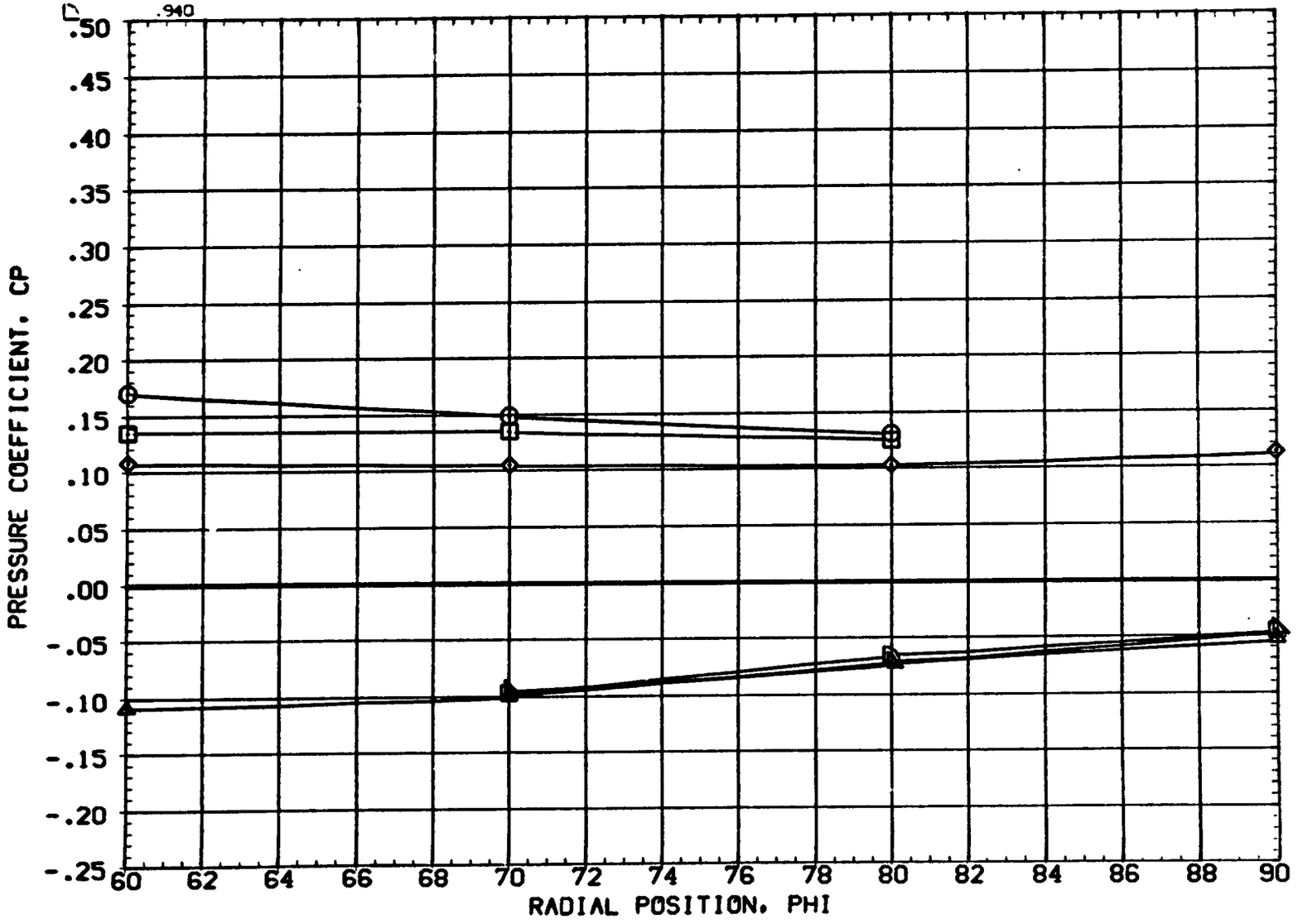
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
□	.087	12.010	2.950
▽	.126		
◇	.164		
△	.862		
○	.900		
□	.940		



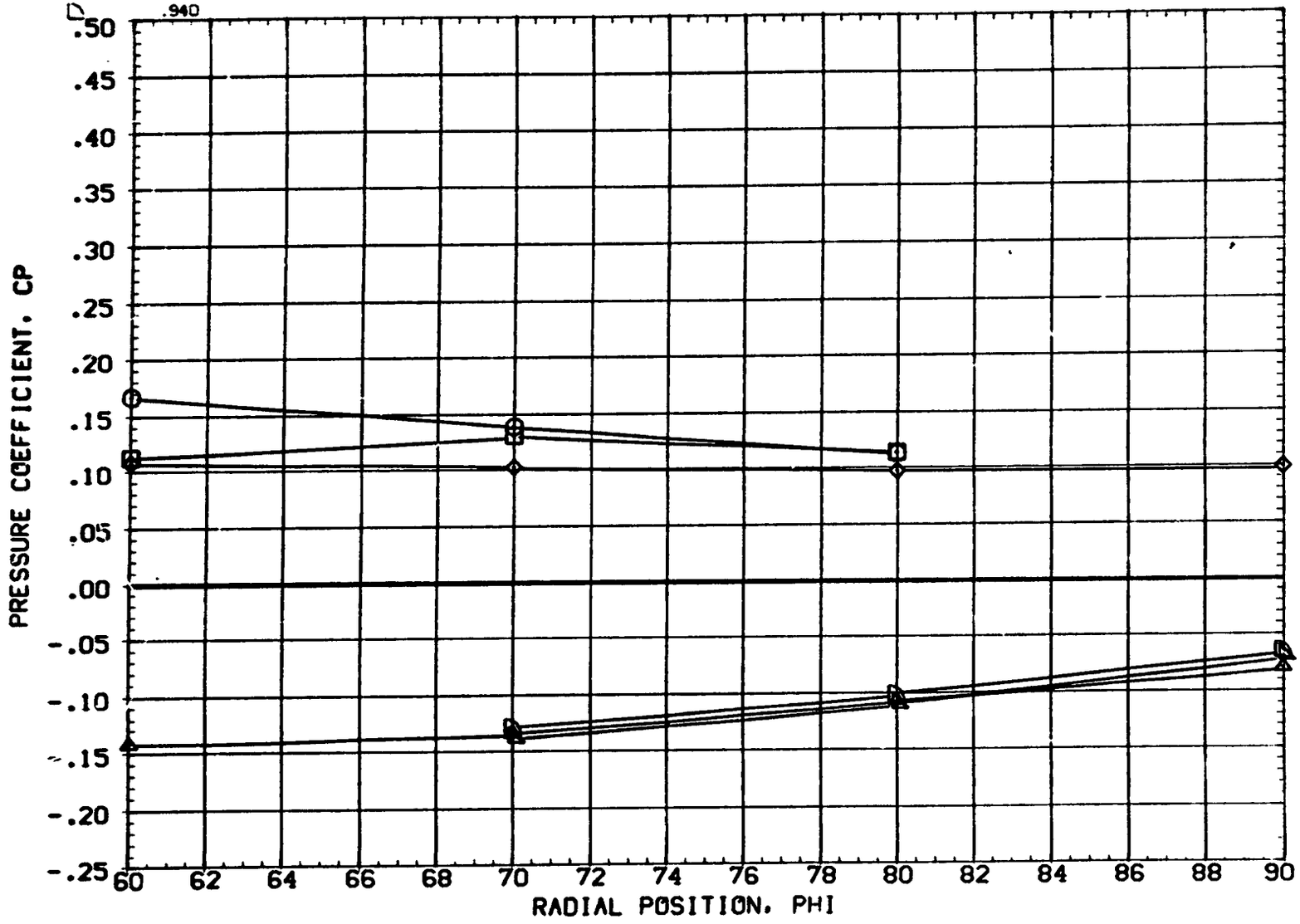
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
	.087	14.000	2.950
	.126		
	.164		
	.862		
	.900		
	.940		



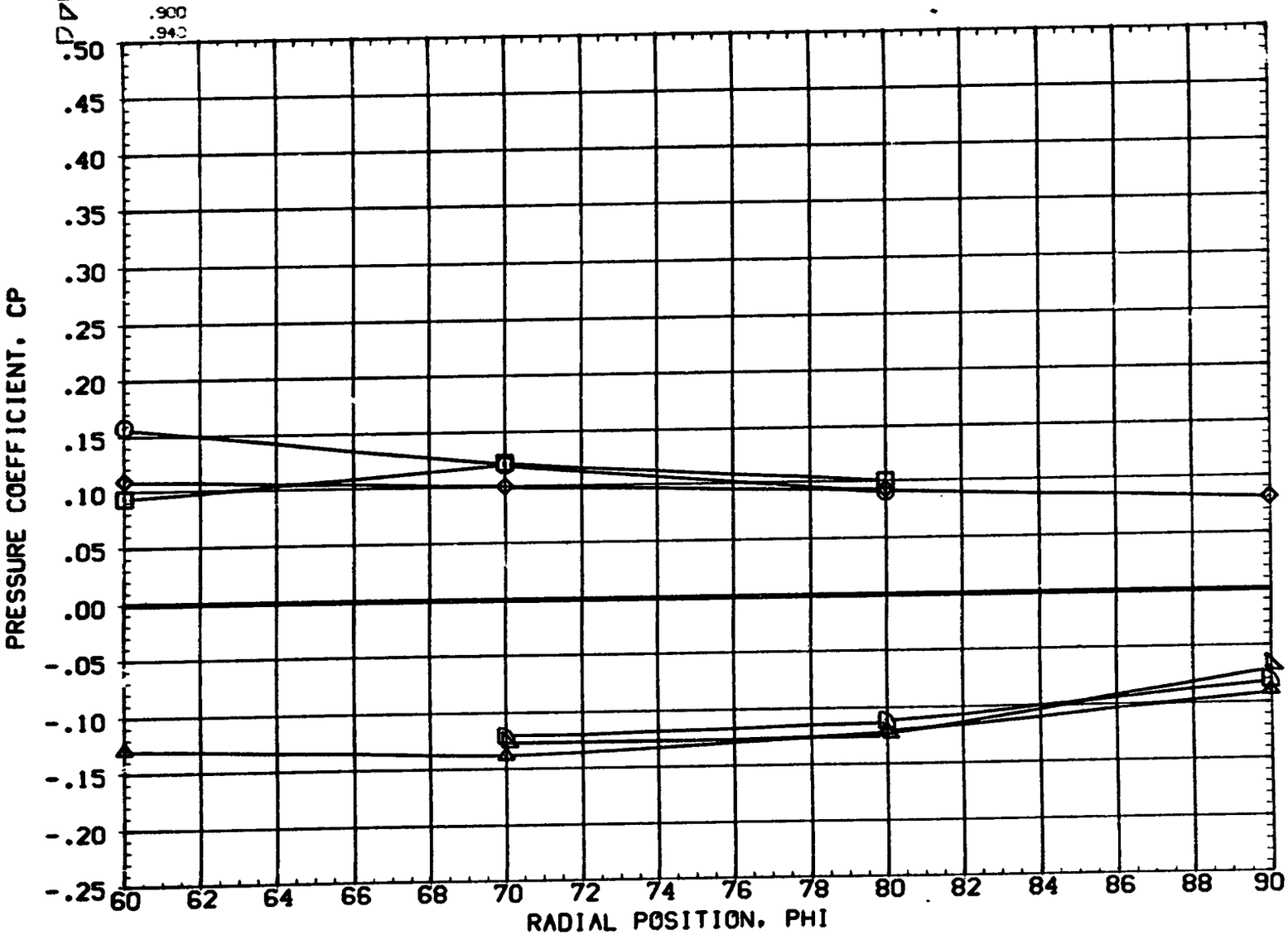
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
	.087	16.010	2.950
	.126		
	.164		
	.862		
	.900		
	.940		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

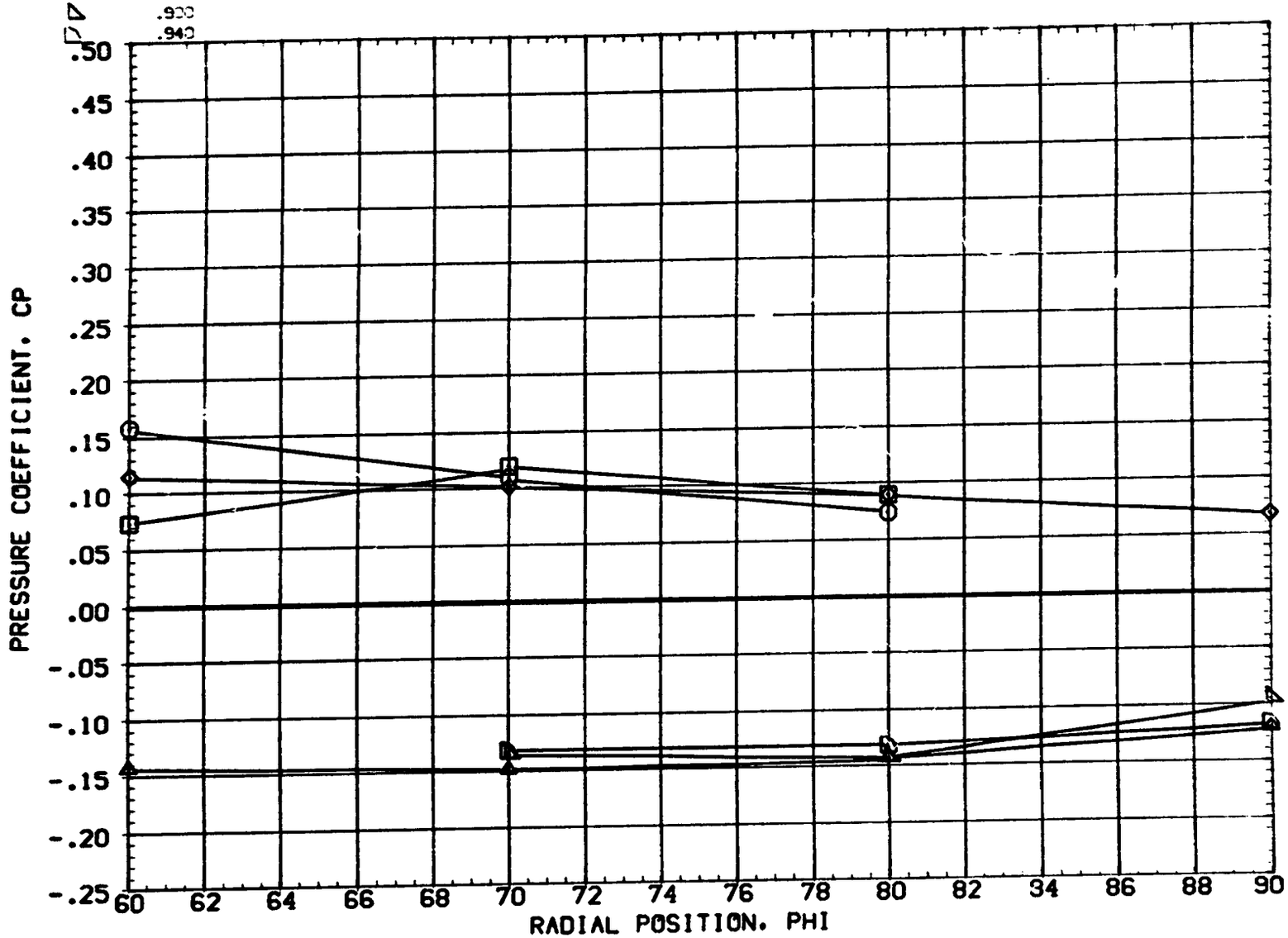


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

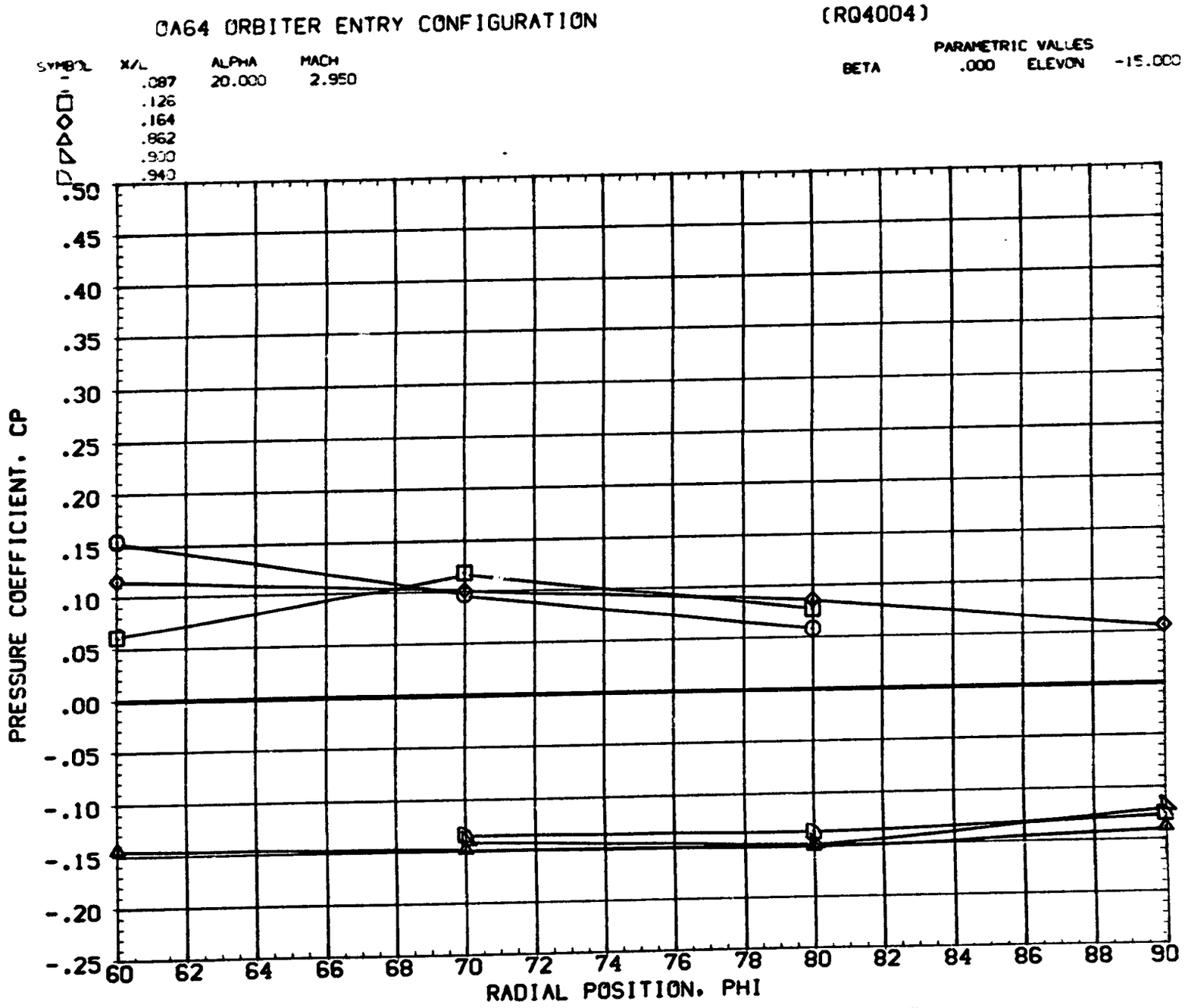
OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

PARAMETRIC VALUES

SYMBOL	X/L	ALPHA	MACH	BETA		ELEVON	
	.087	18.000	2.950	.000		-15.000	
	.125						
	.164						
	.862						
	.900						
	.940						



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



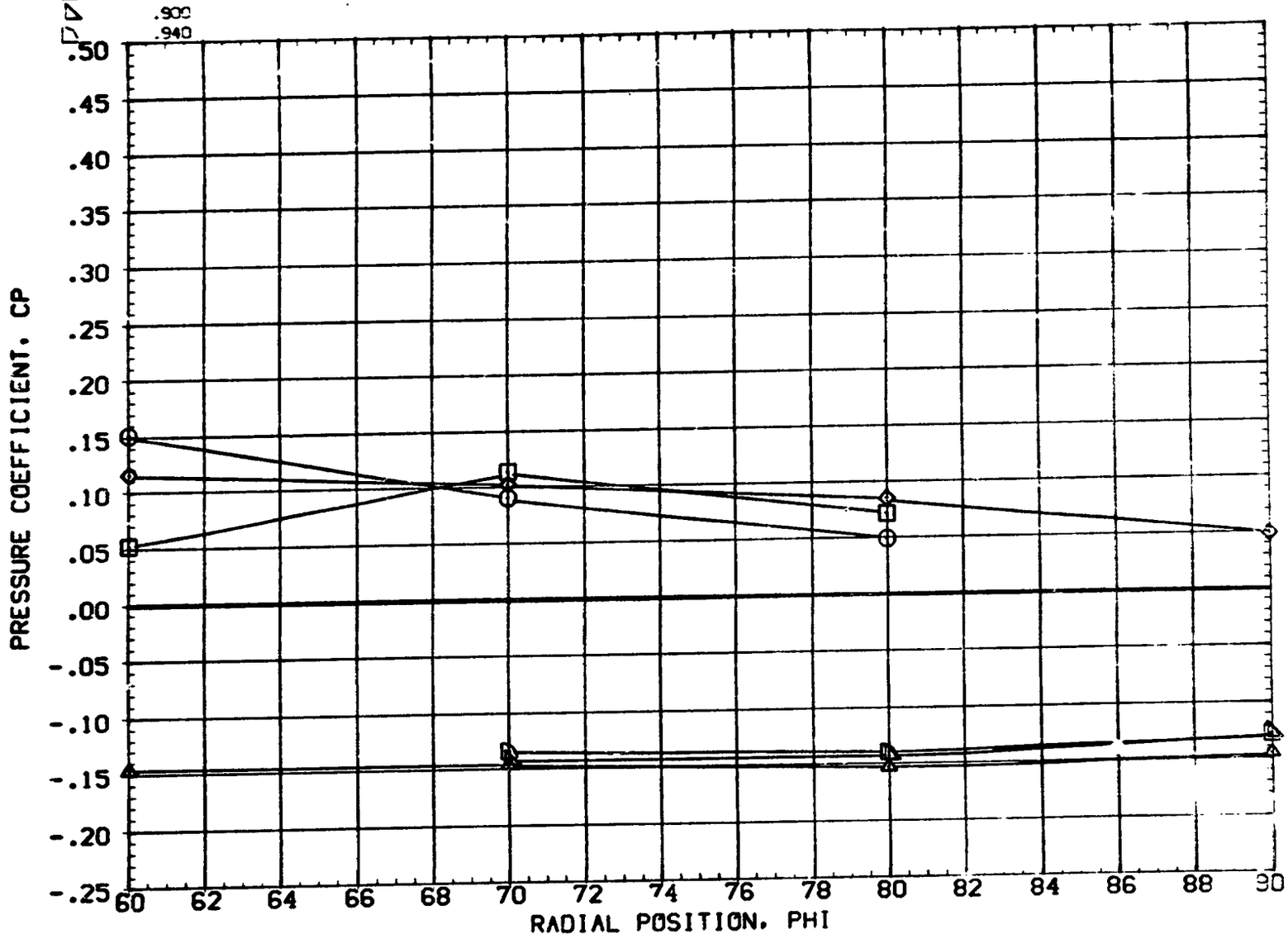
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

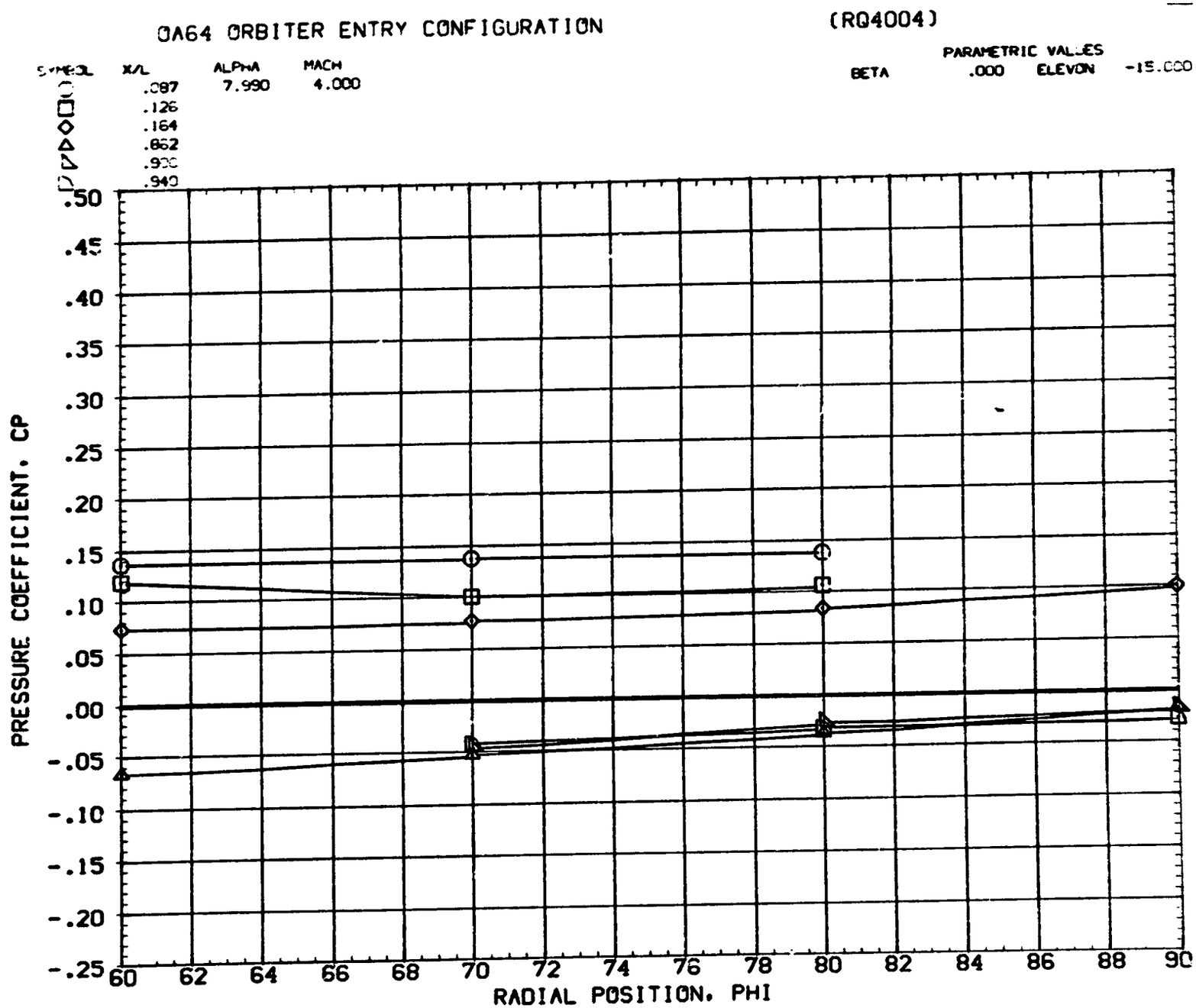
PARAMETRIC VALUES

BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
	.087	20.950	2.950
	.126		
	.164		
	.862		
	.900		
	.940		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

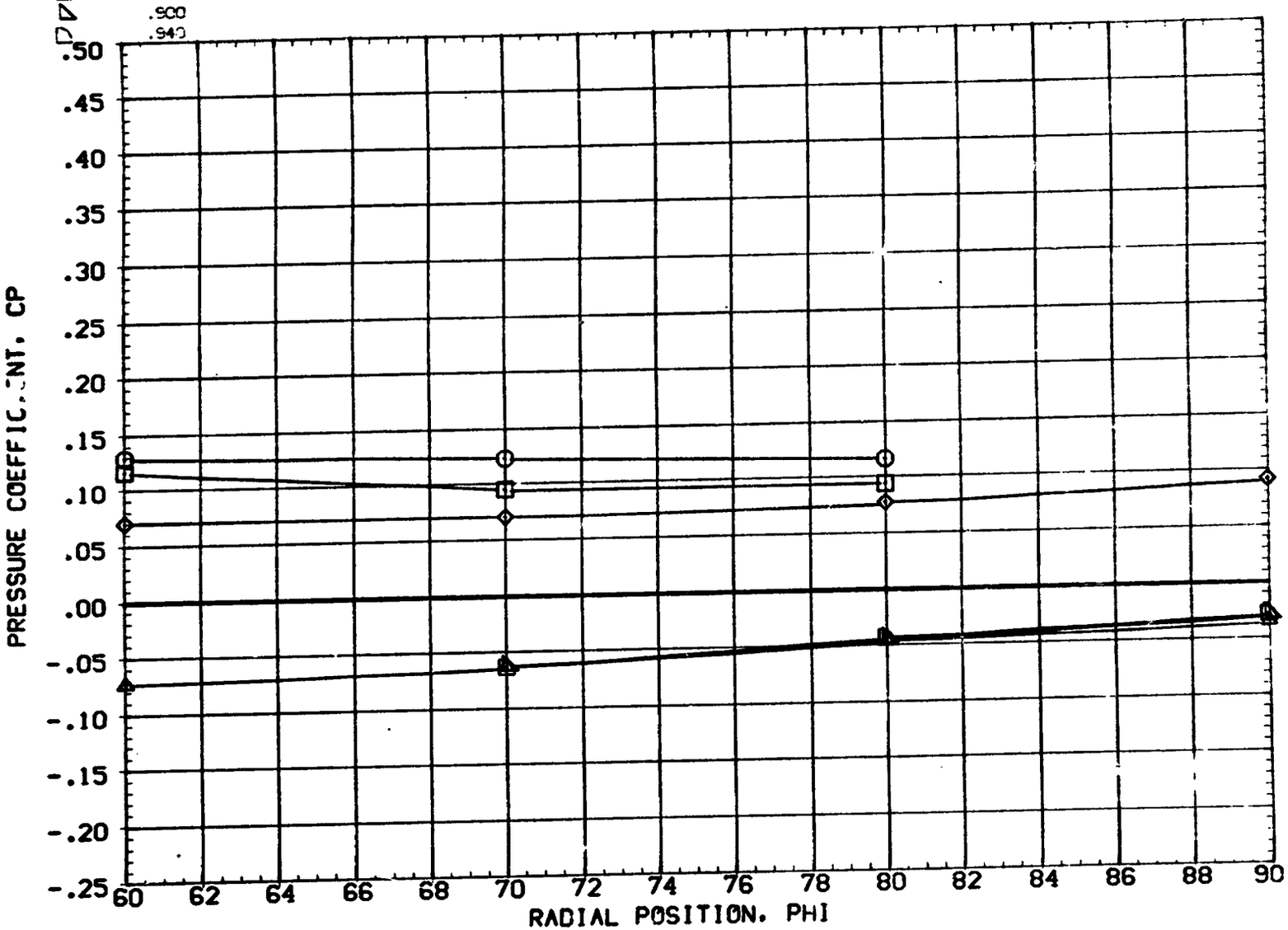


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

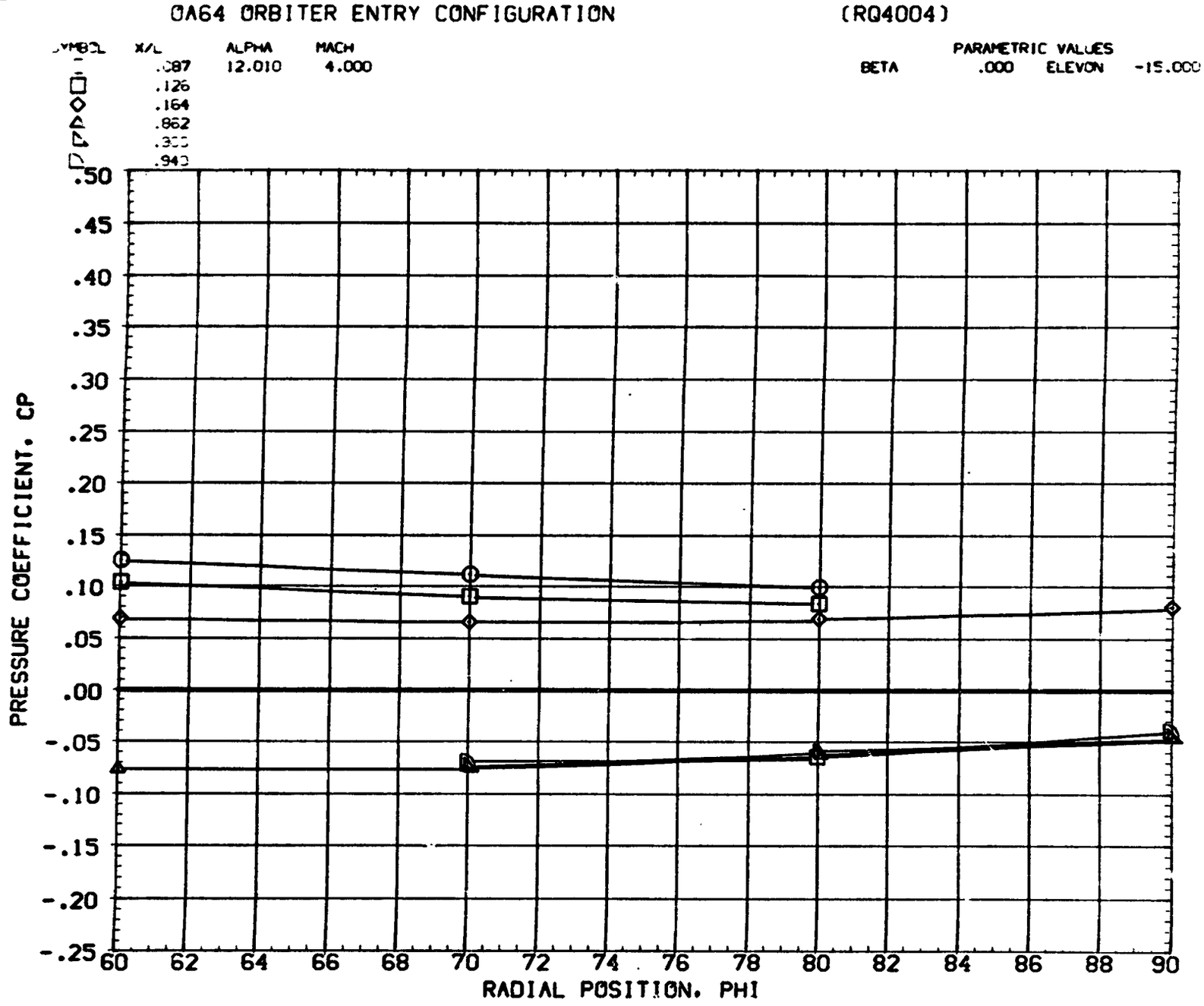
OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

PARAMETRIC VALUES

SYMBOL	X/L	ALPHA	MACH	BETA		ELEVON	
	.087	10.000	4.000	.000		-15.000	
	.126						
	.164						
	.862						
	.900						
	.940						



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

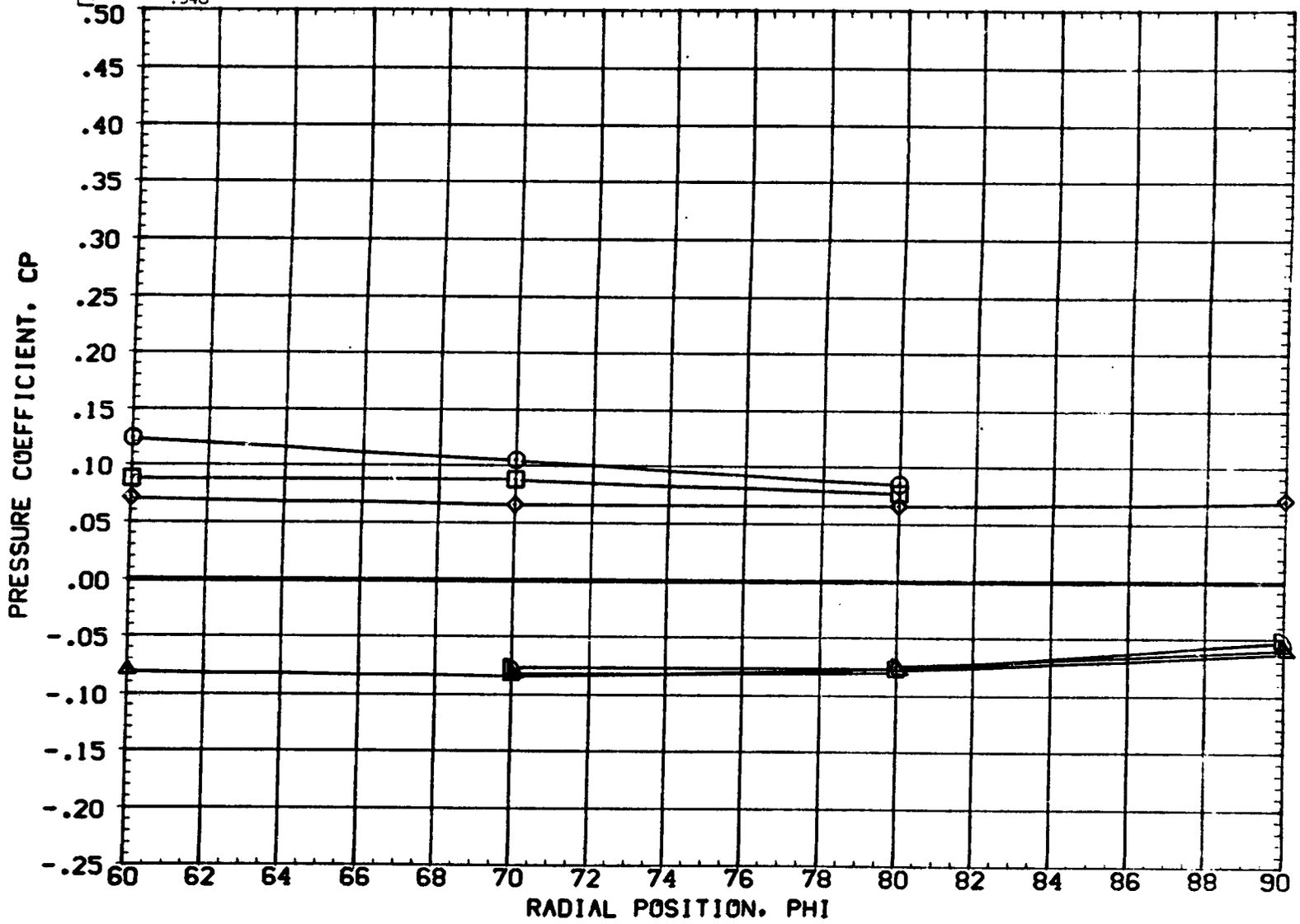


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

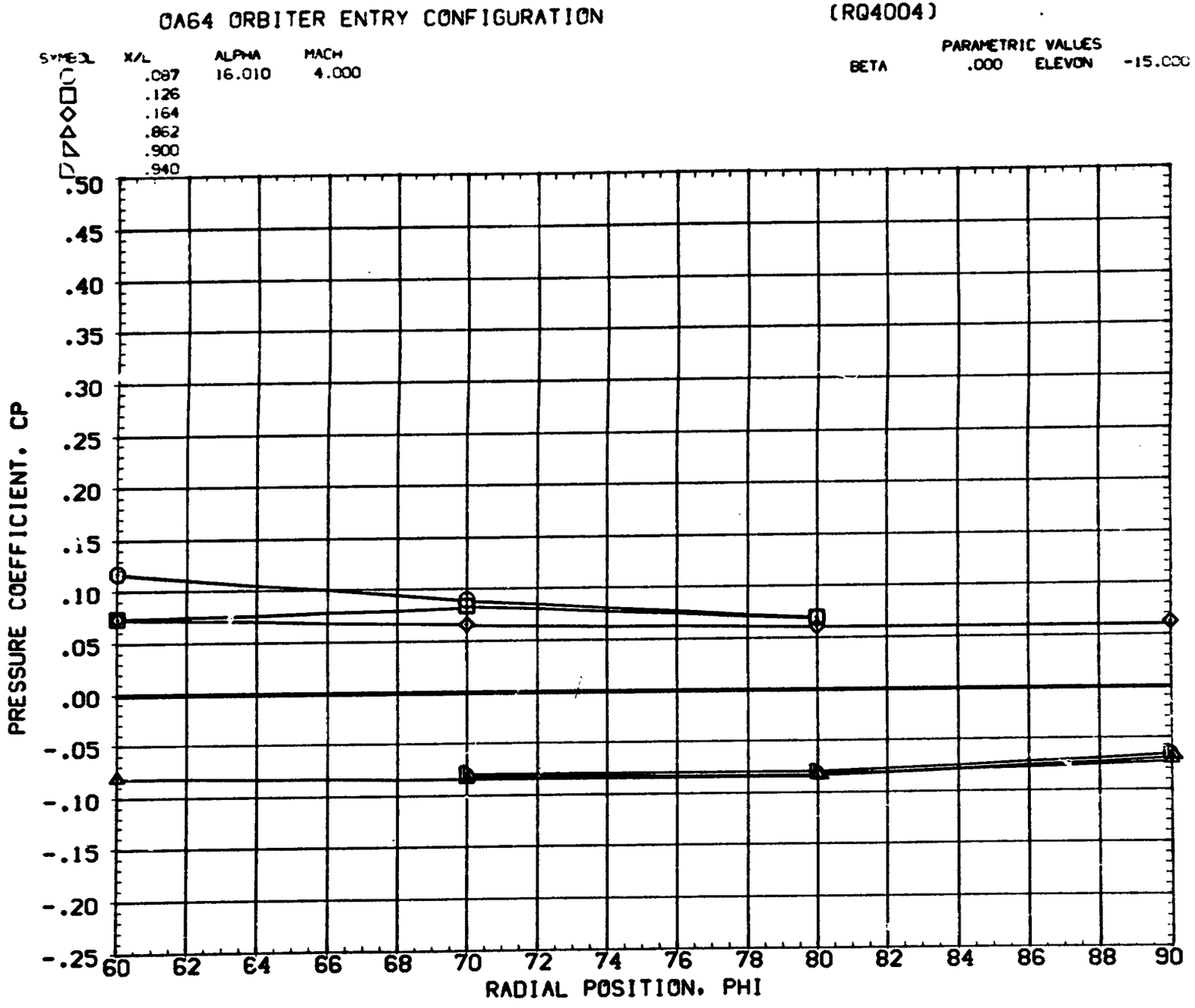
OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
	.087	14.000	4.000
	.126		
	.164		
	.862		
	.900		
	.940		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



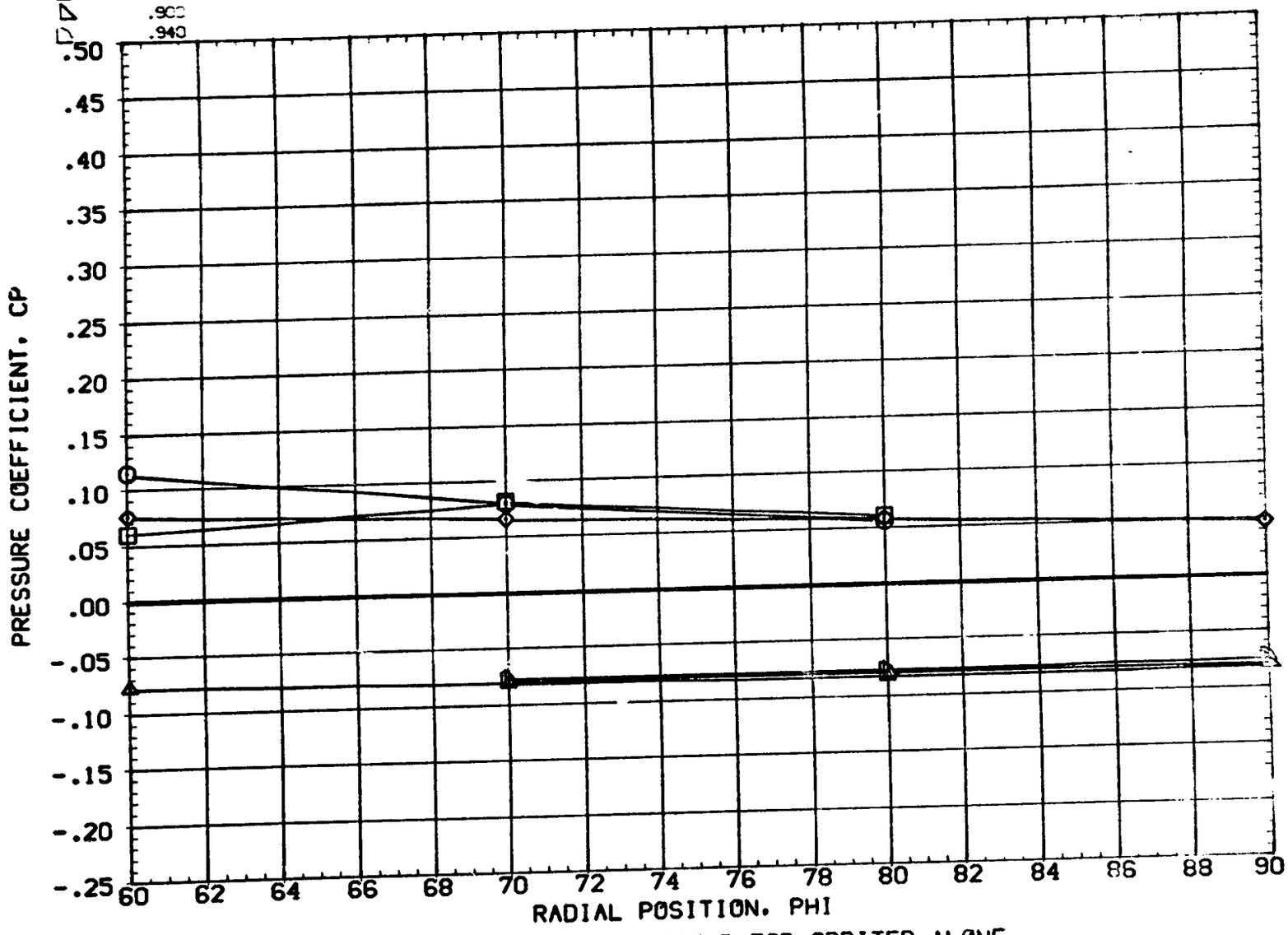
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
	.087	18.010	4.000
	.126		
	.164		
	.862		
	.900		
	.940		

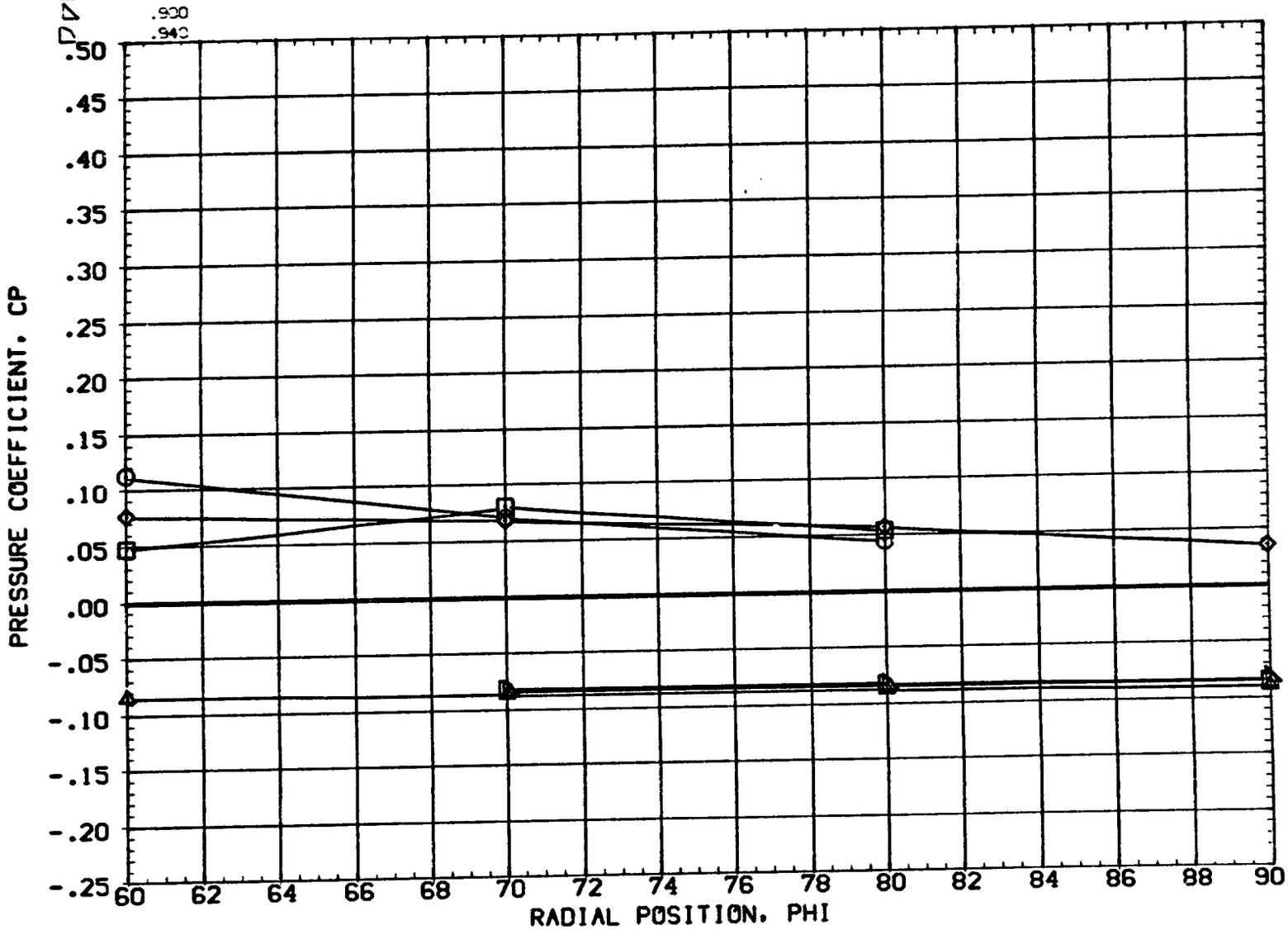


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

PARAMETRIC VALUES

SYMBOL	X/L	ALPHA	MACH	BETA		ELEVON	
	.087	20.000	4.000	.000		-15.000	
	.126						
	.164						
	.862						
	.900						
	.940						



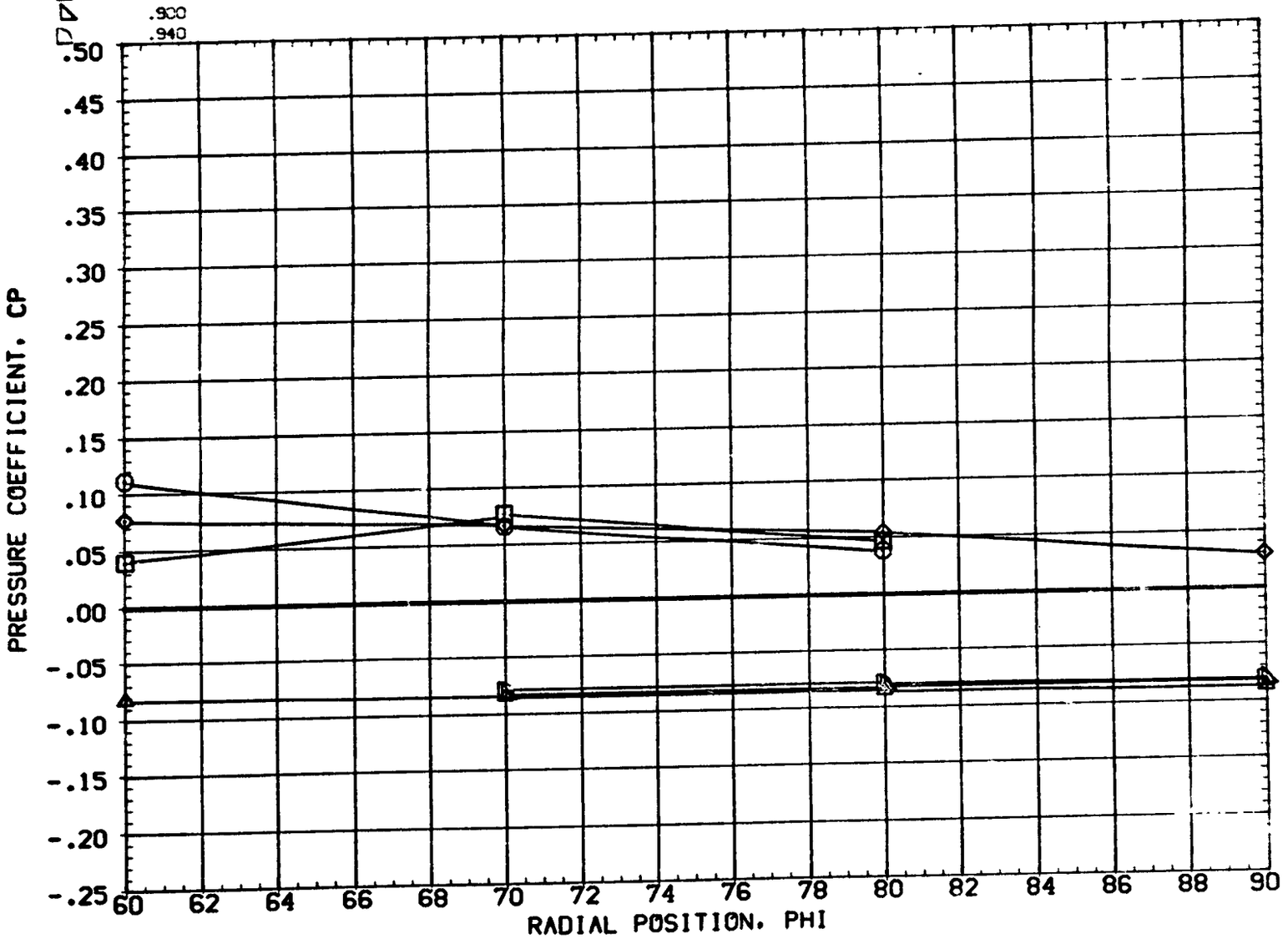
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

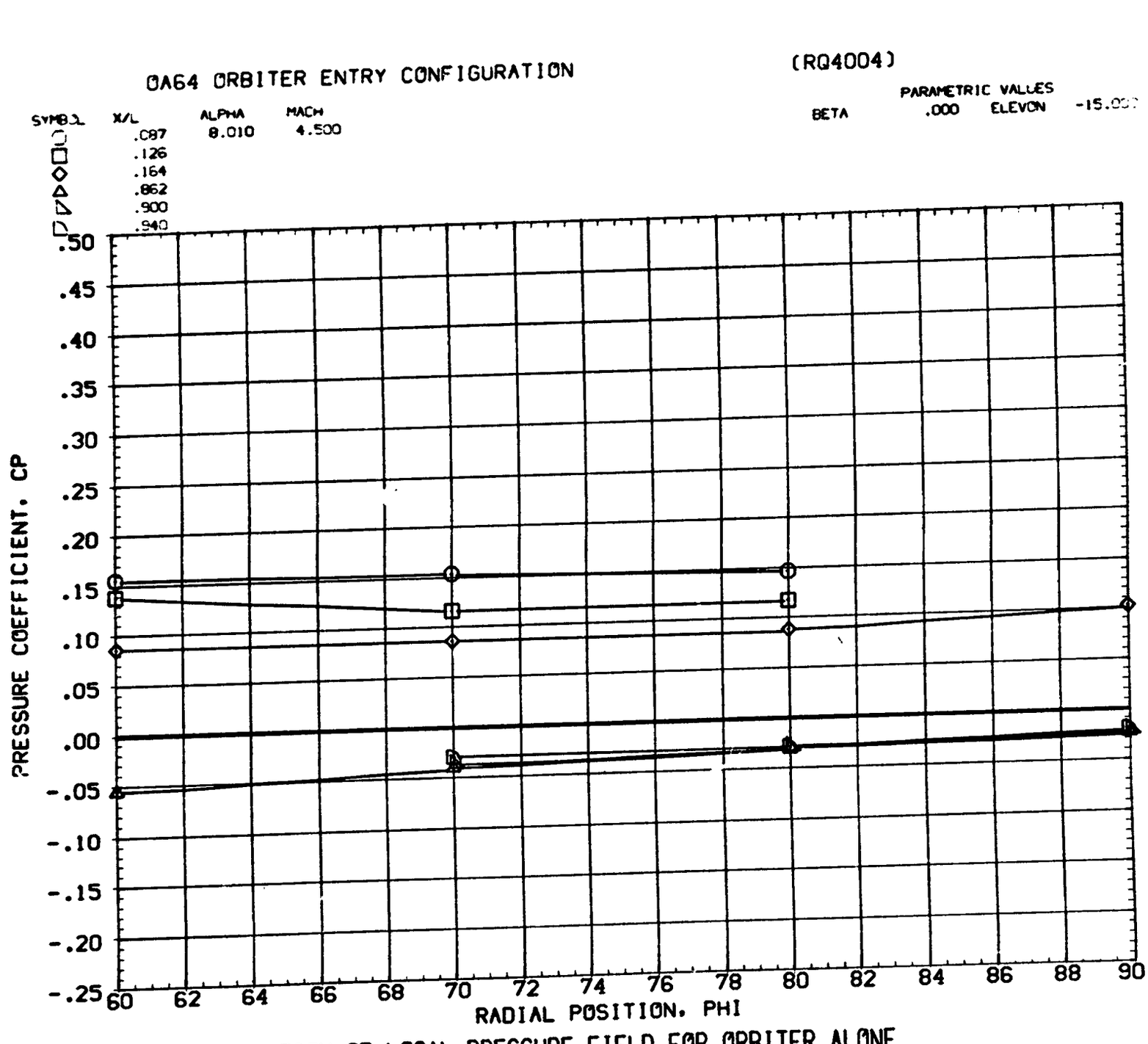
PARAMETRIC VALUES

BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
○	.087	20.970	4.000
□	.126		
◇	.164		
△	.862		
▽	.900		
▷	.940		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



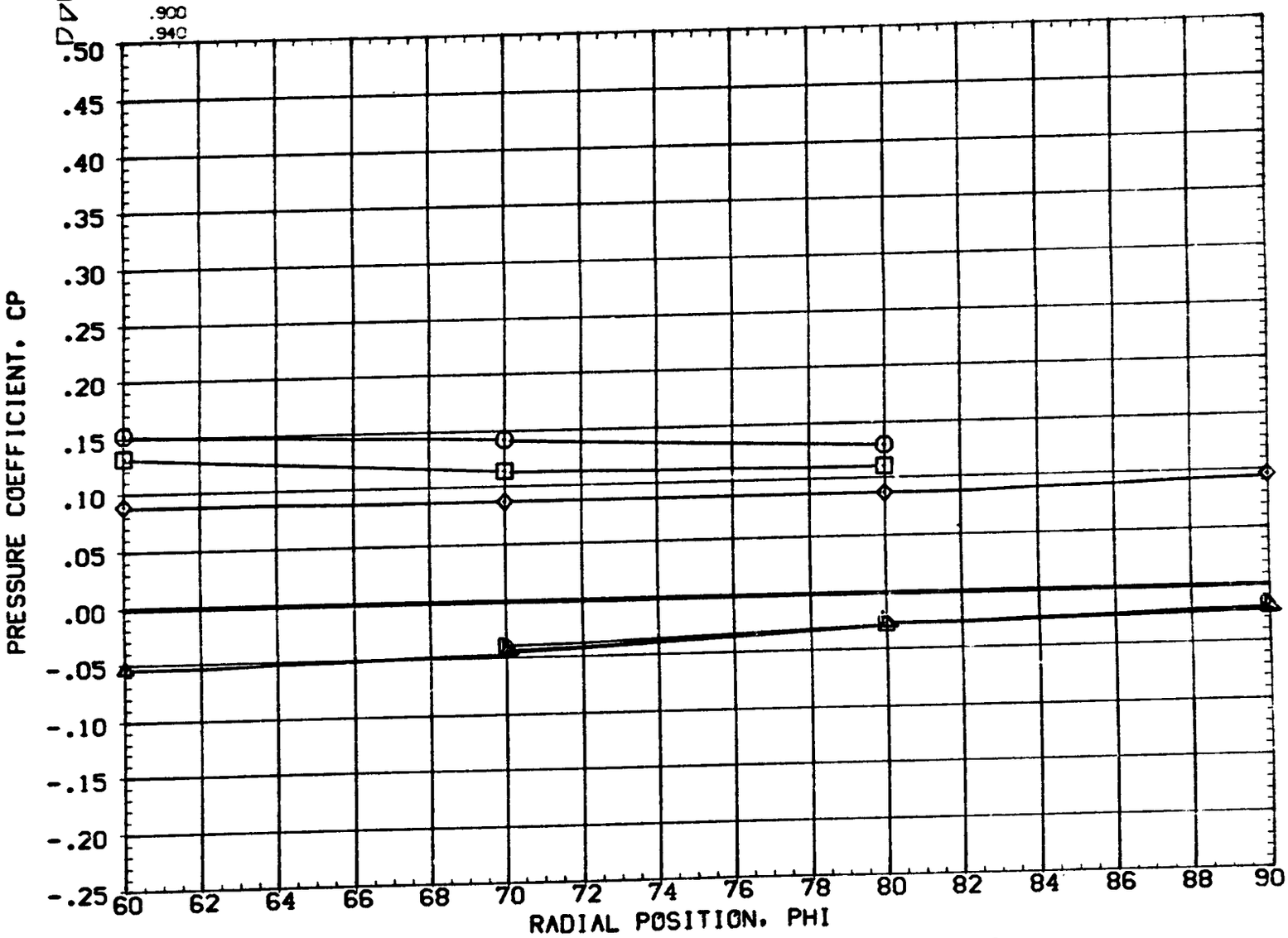
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

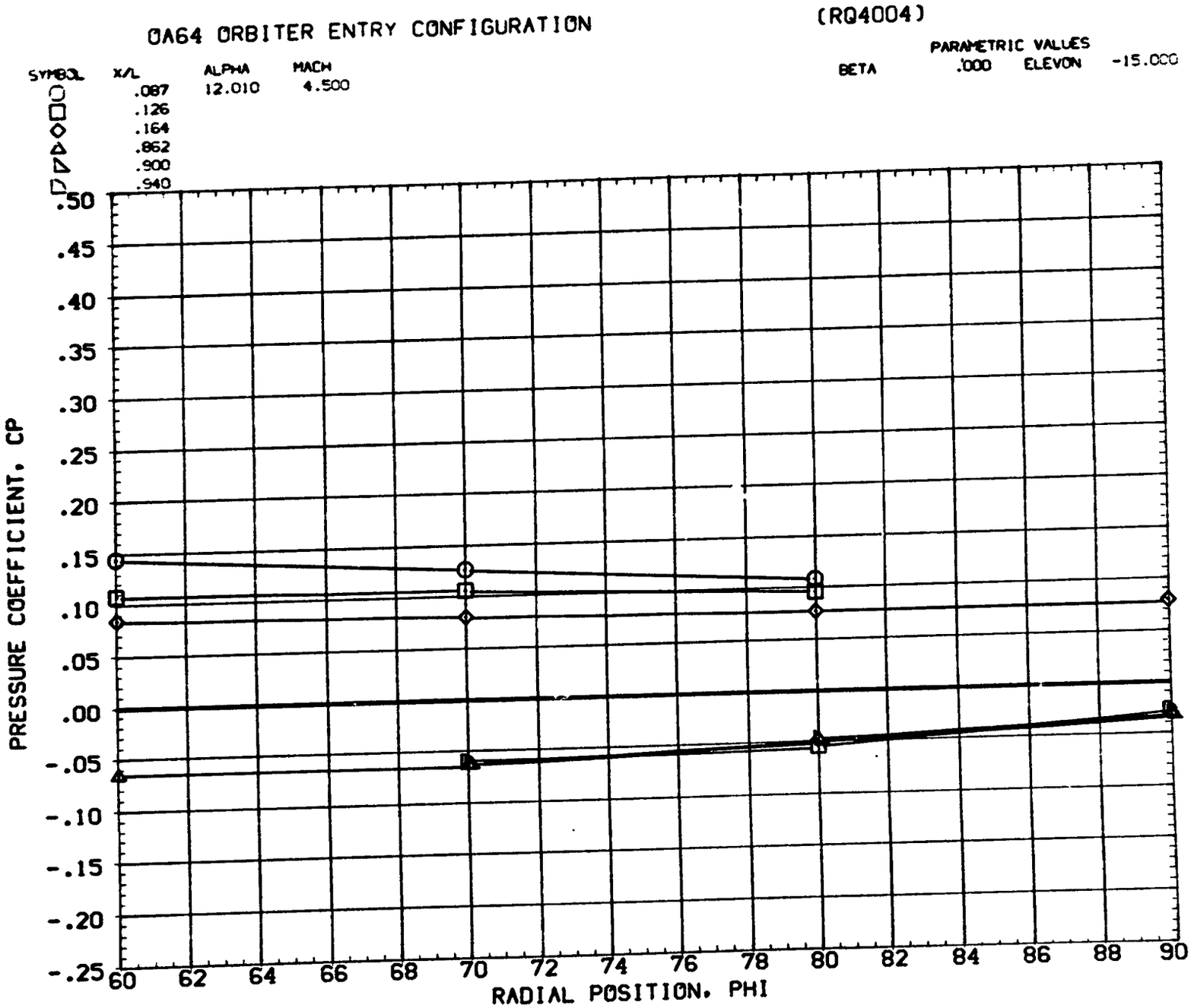
PARAMETRIC VALUES

BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
○	.087	10.000	4.500
□	.126		
◇	.164		
△	.862		
▽	.900		
⬠	.940		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

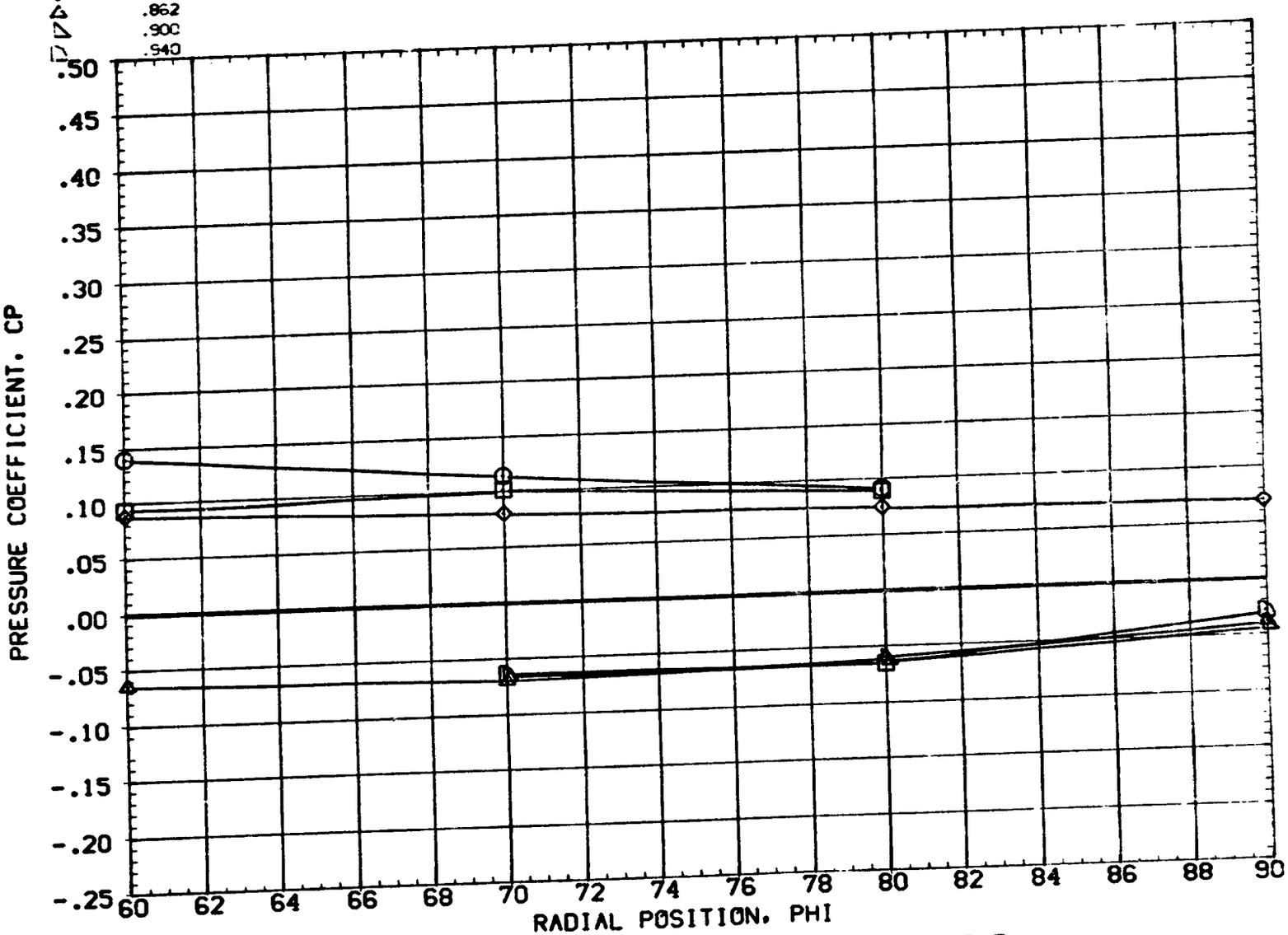
(RQ4004)

OA64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
□	.087	14.010	4.500
▽	.126		
△	.164		
◇	.862		
○	.900		
□	.940		

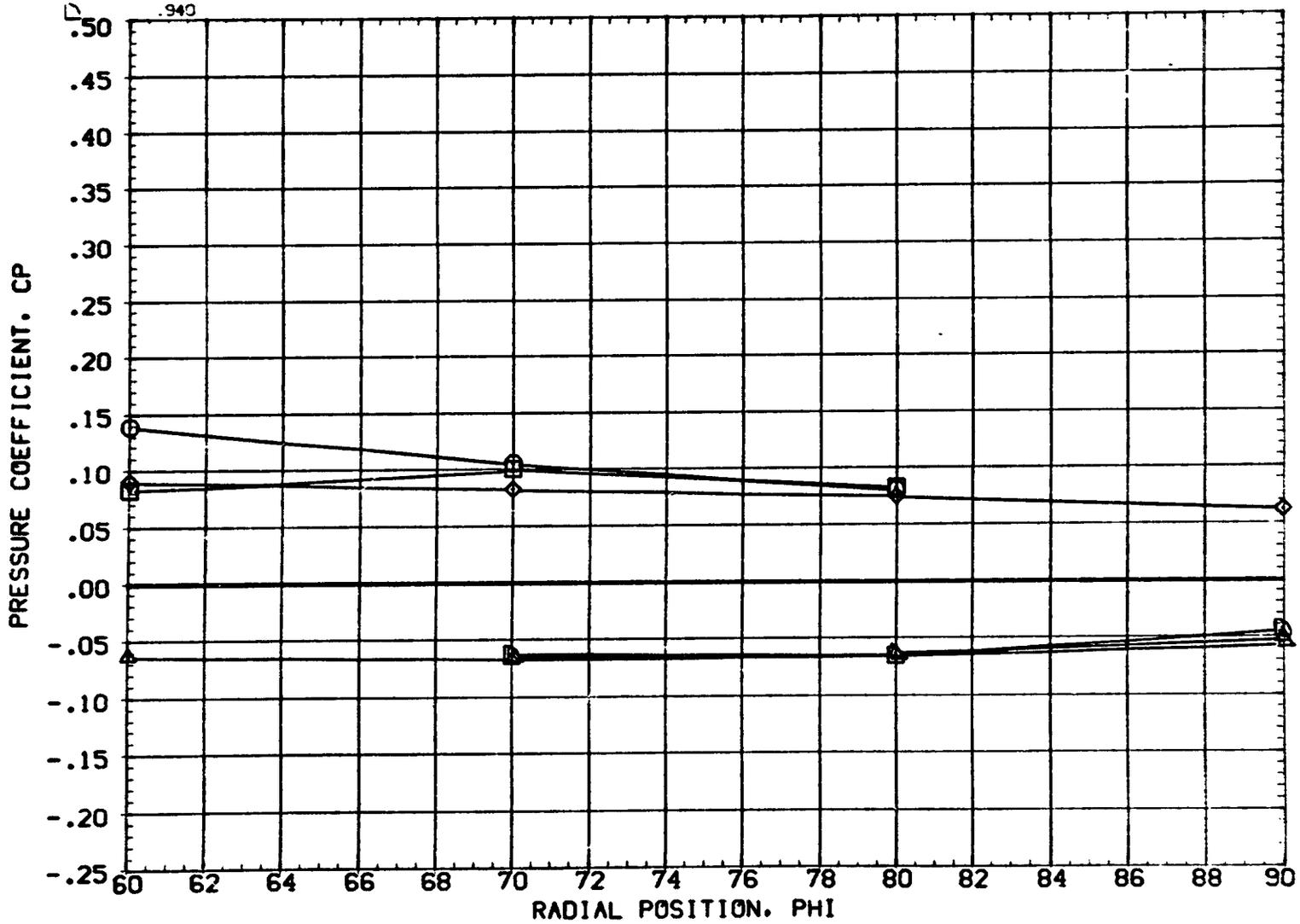


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
▽	.087	16.000	4.500
△	.126		
◇	.164		
□	.862		
▷	.900		
○	.940		

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

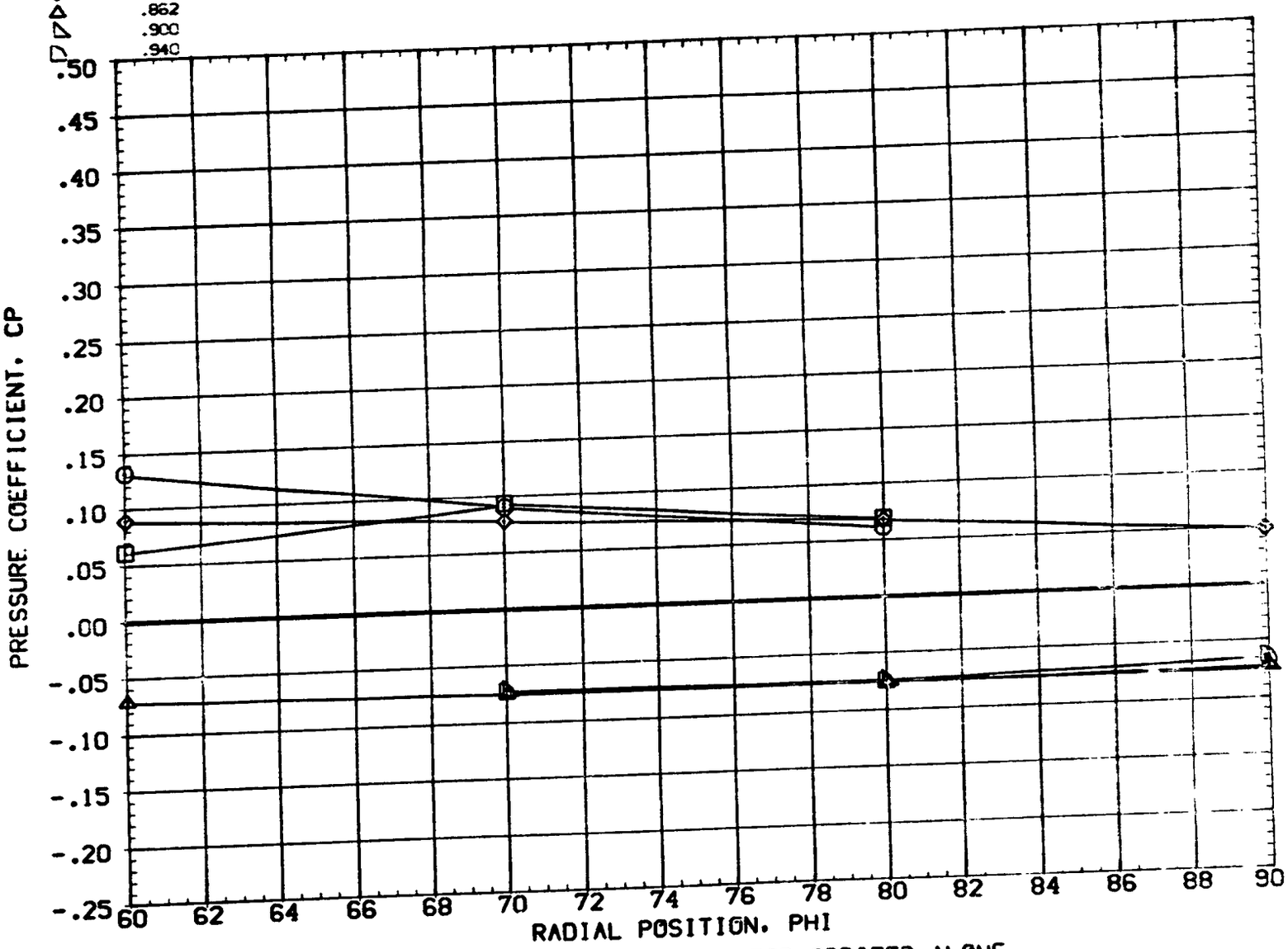


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

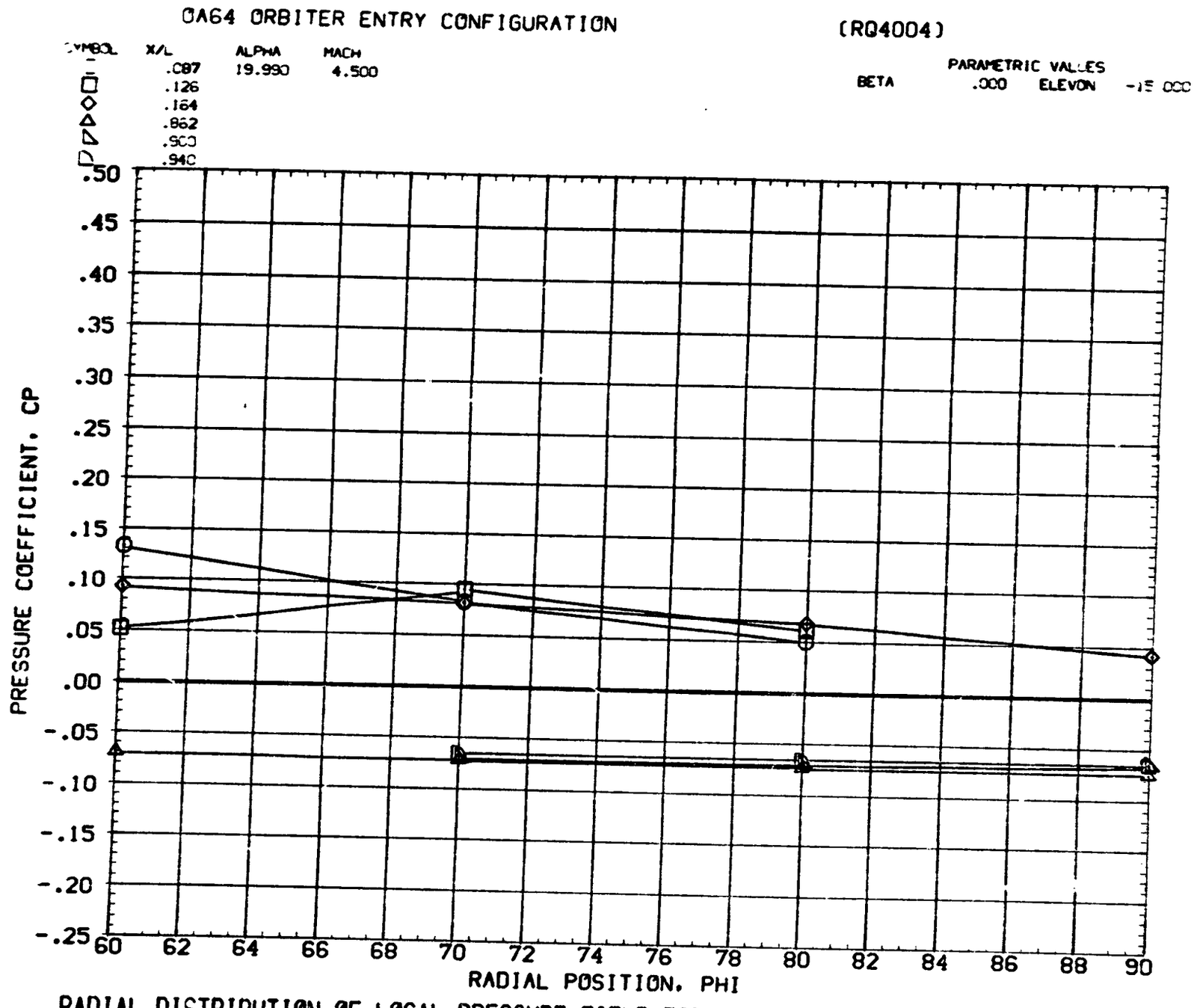
OA64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
○	.087	18.000	4.500
□	.126		
◇	.164		
△	.862		
▽	.900		
▷	.940		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

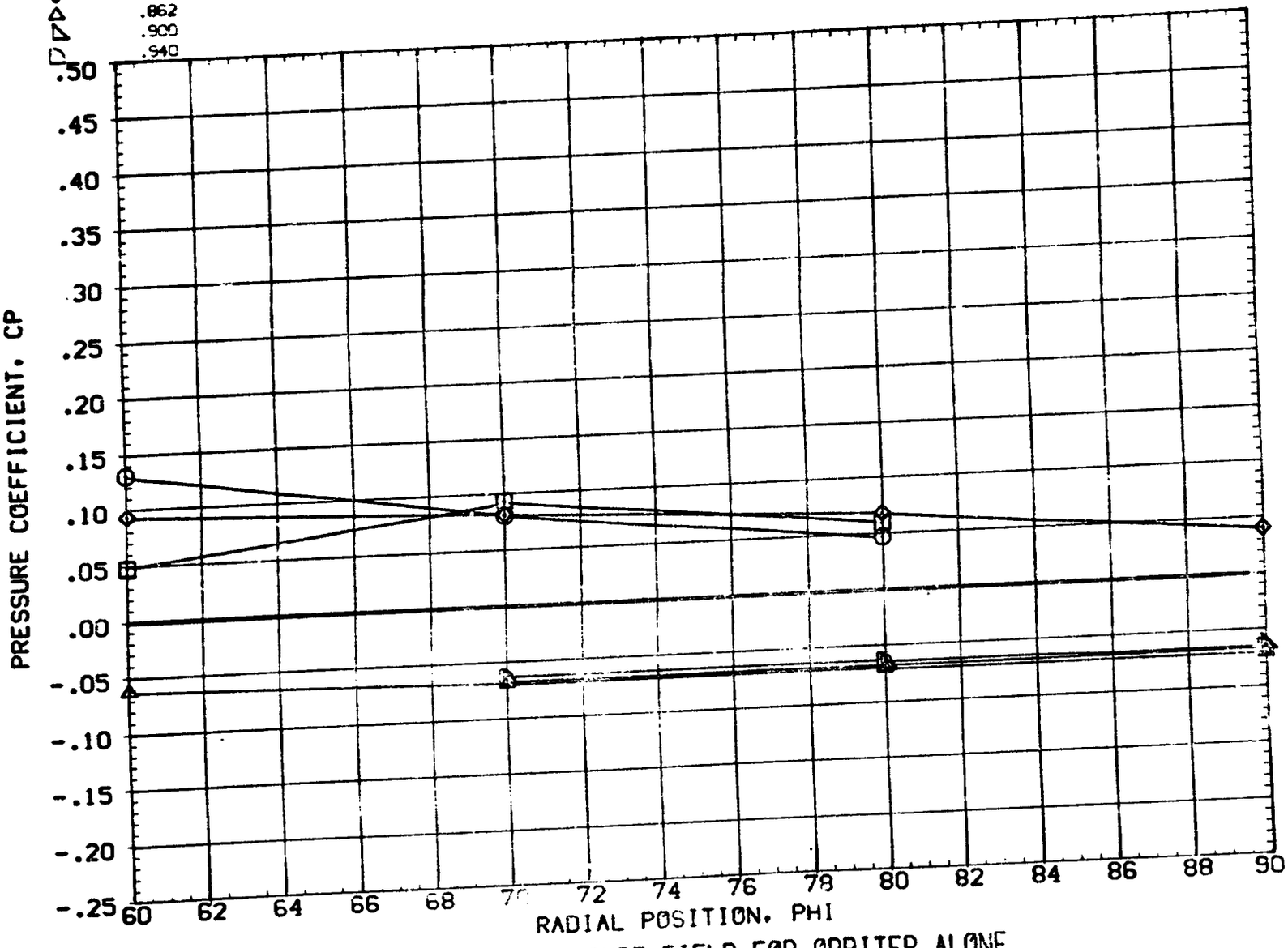


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

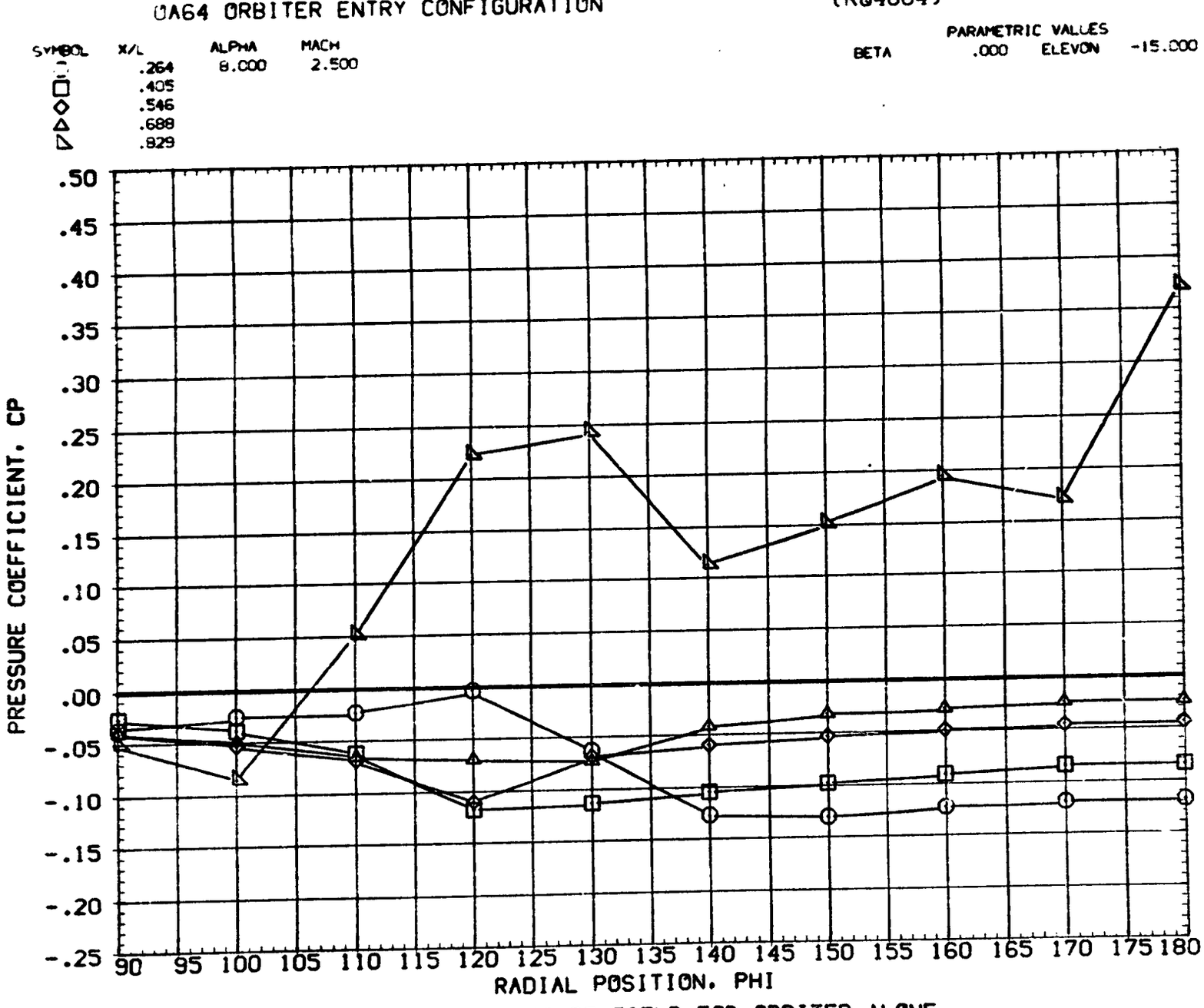
OA64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
▽	.087	20.960	4.500
△	.126		
◇	.164		
□	.862		
▷	.900		
○	.940		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

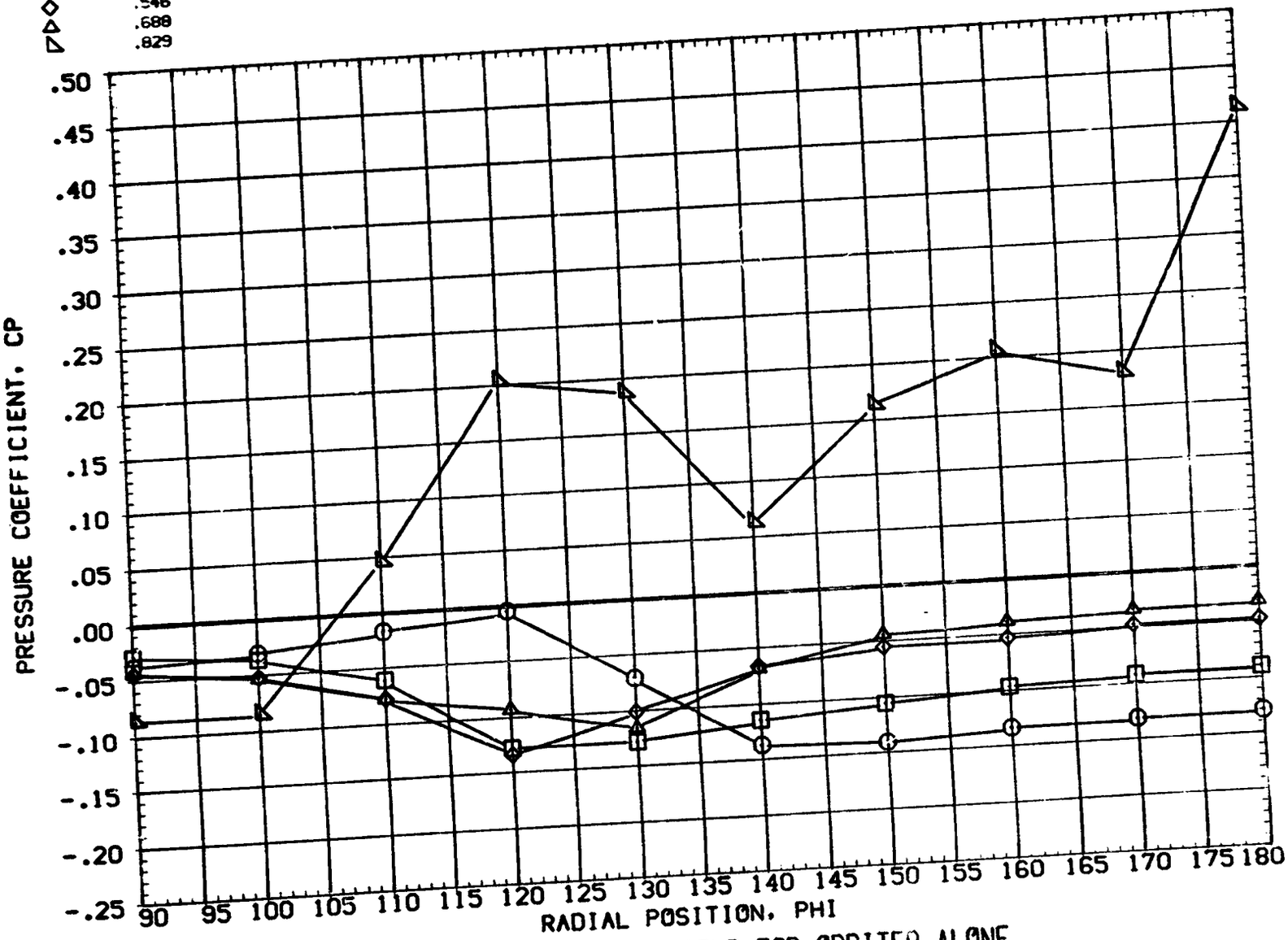


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

SYMBOL X/L ALPHA MACH
10.000 2.500
△ .264
▷ .405
◇ .546
□ .688
○ .829



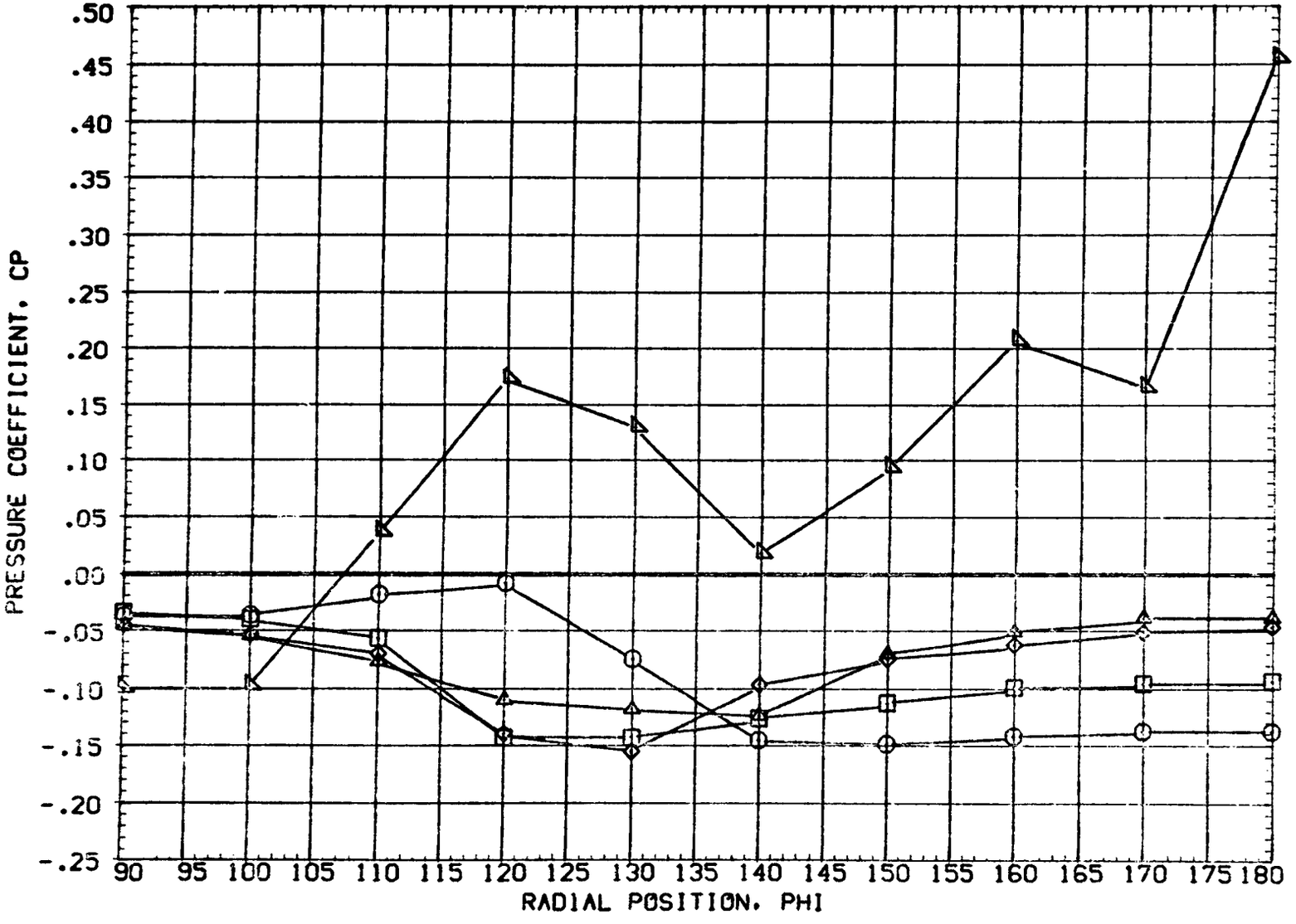
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
○	.264	12.010	2.500
□	.405		
◇	.546		
△	.688		
▽	.829		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



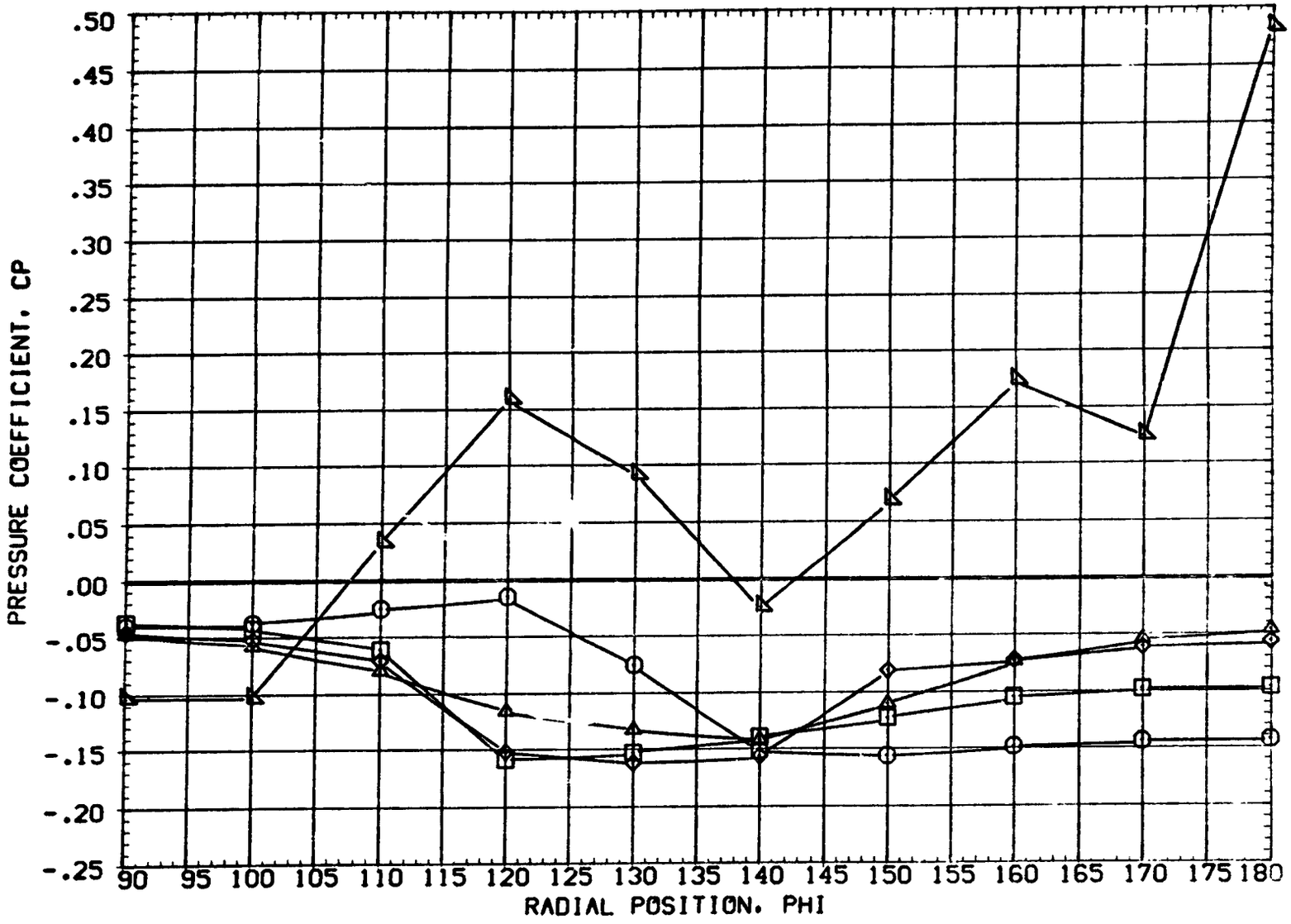
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
	.264	14.000	2.500
	.405		
	.546		
	.688		
	.829		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

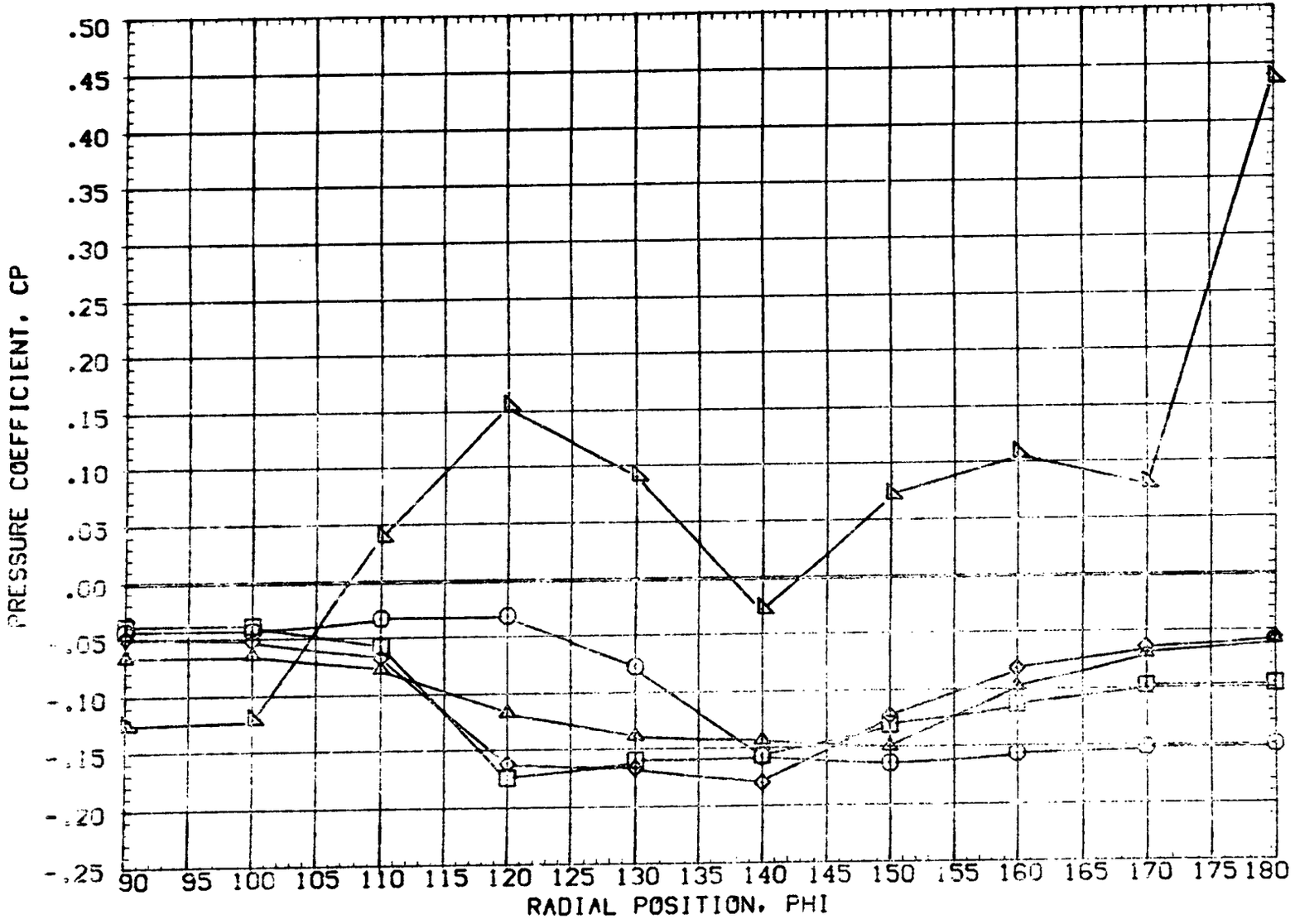


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OAS4 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
○	.264	16.000	2.500
□	.405		
◇	.546		
△	.688		
▽	.829		

PARAMETRIC VALUES
BETA .000 ELEVON -15.000



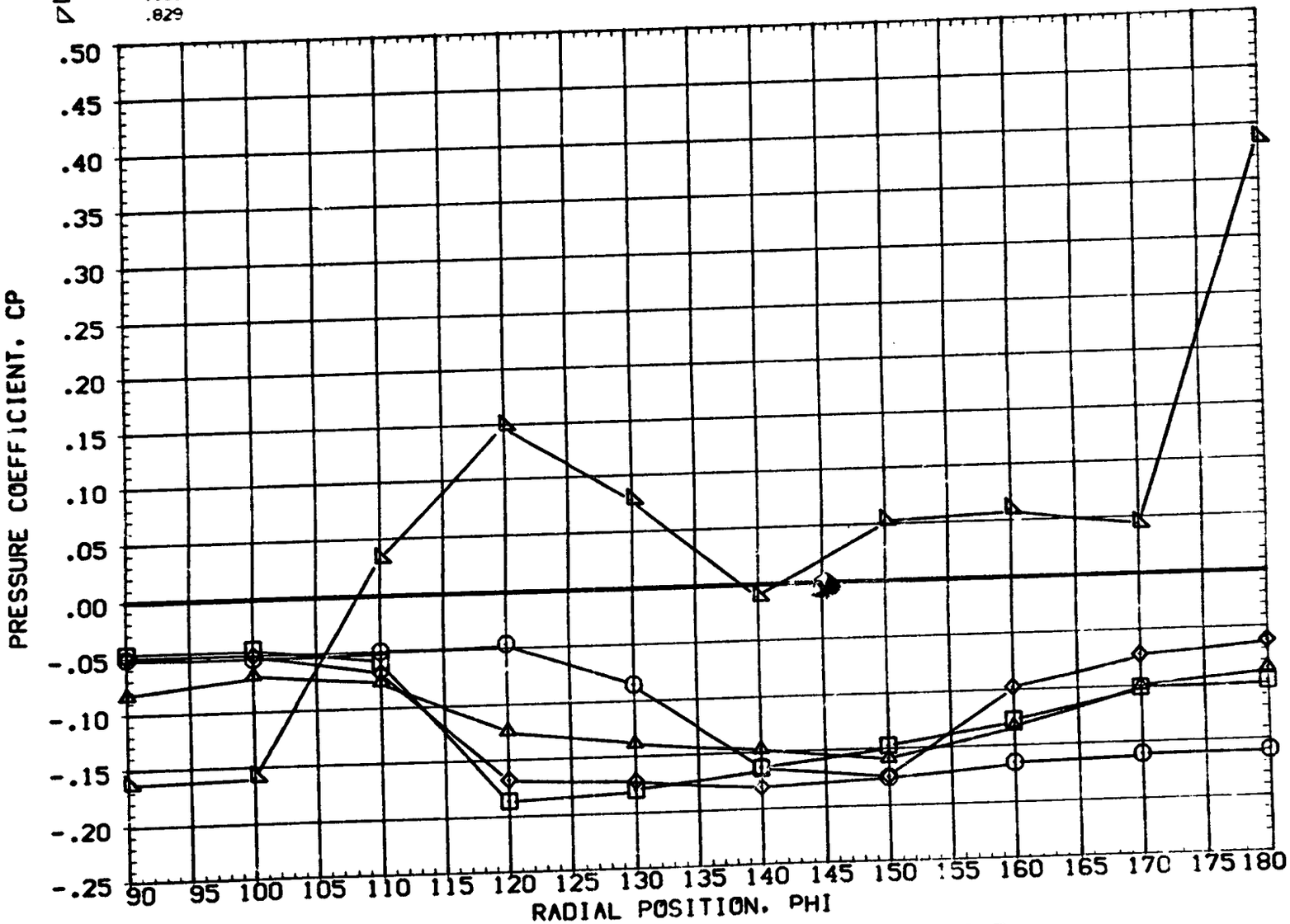
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

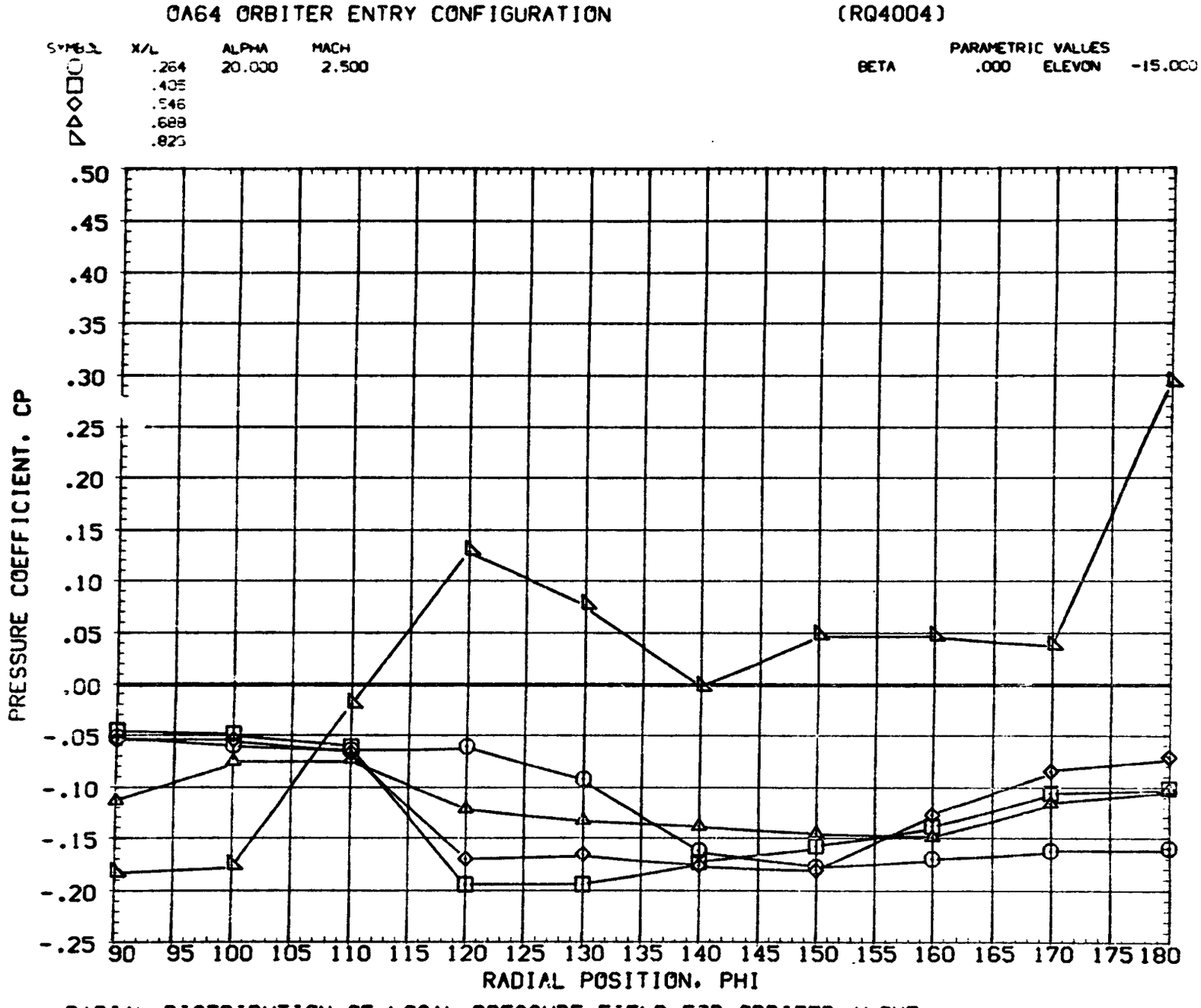
PARAMETRIC VALUES

BETA .000 ELEVON -15.000

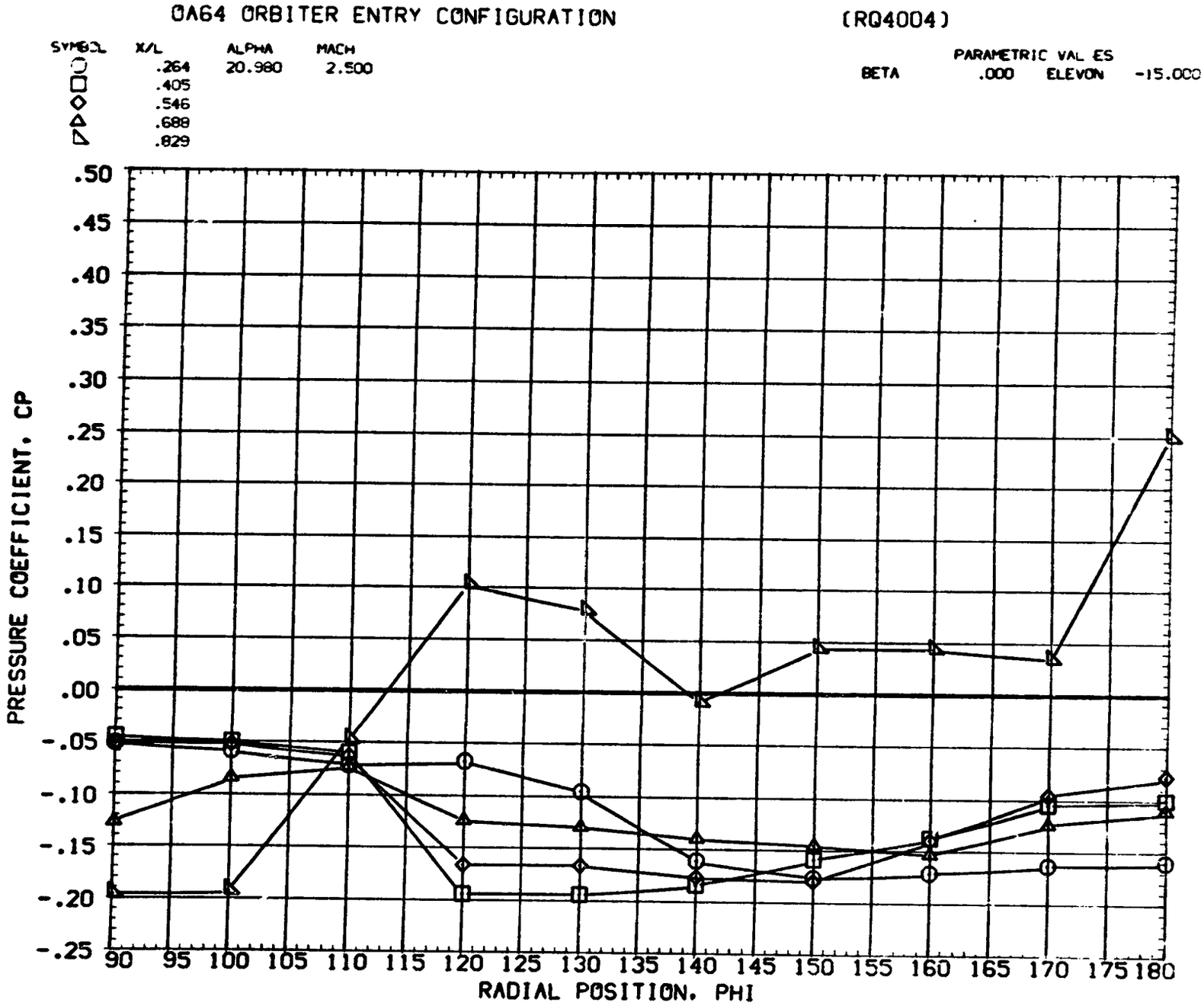
SYMBOL	X/L	ALPHA	MACH
△	.264	18.000	2.500
▷	.405		
◇	.546		
□	.688		
▽	.829		



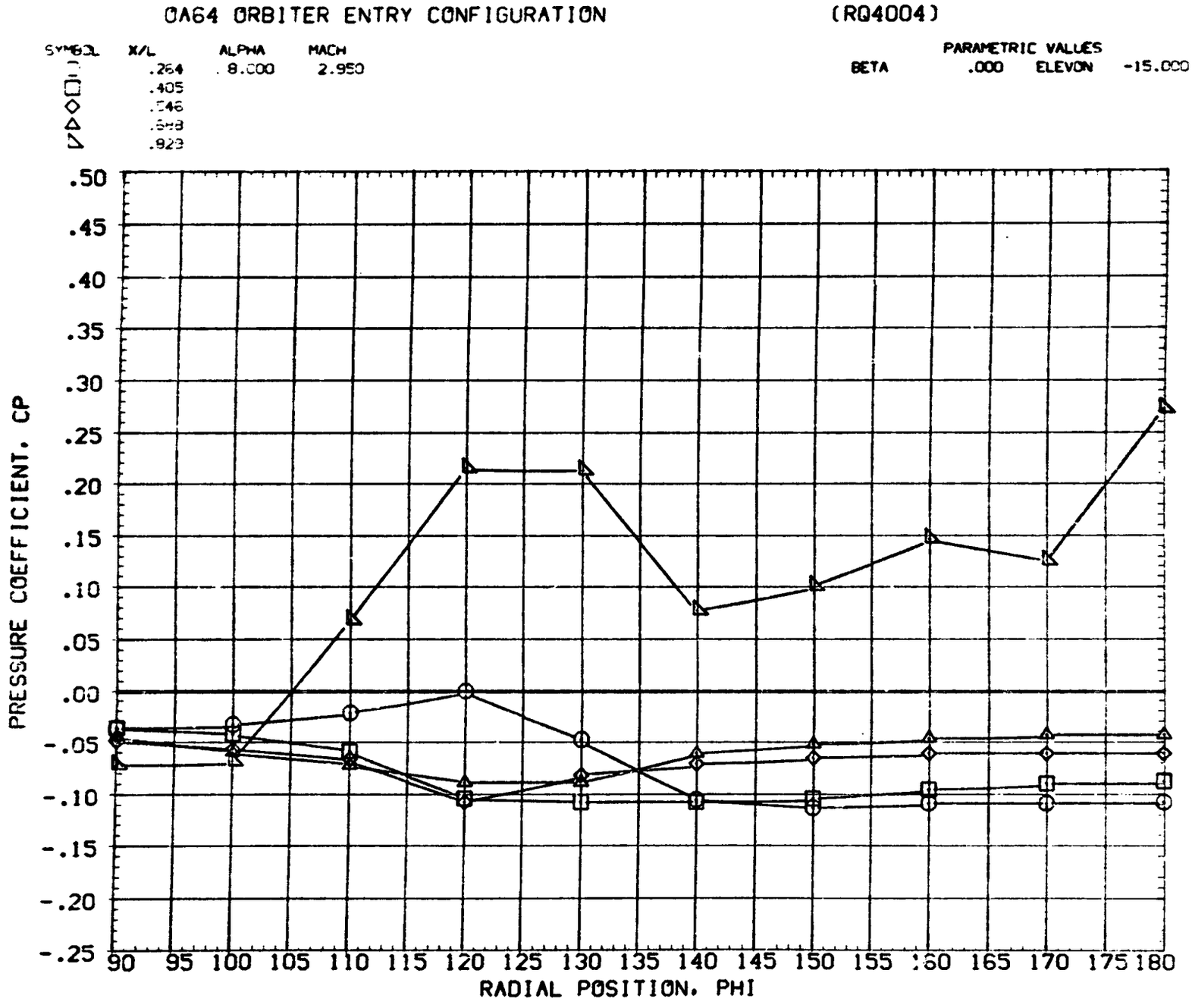
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



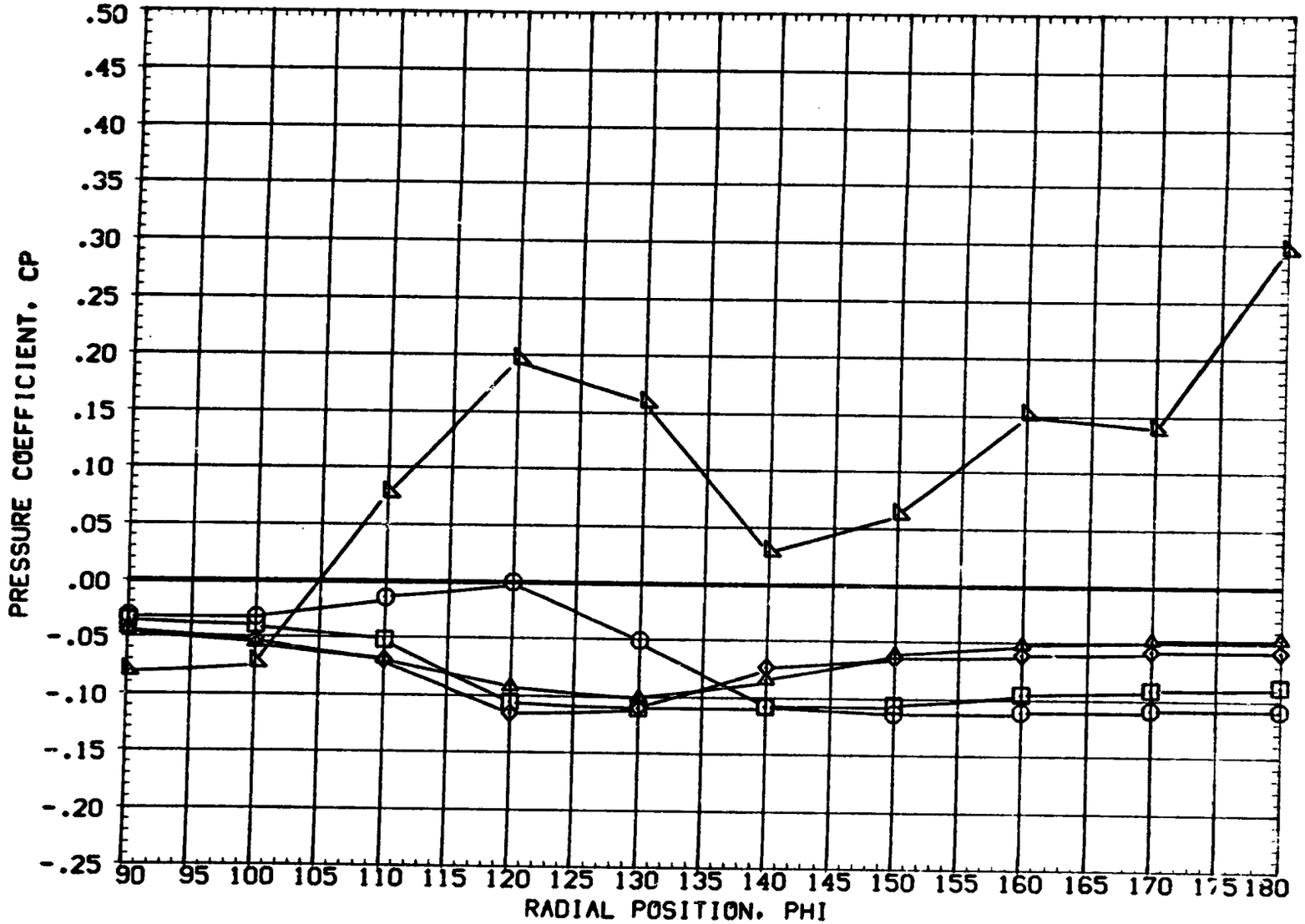
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
○	.264	10.000	2.950
□	.405		
◇	.546		
△	.688		
▽	.829		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



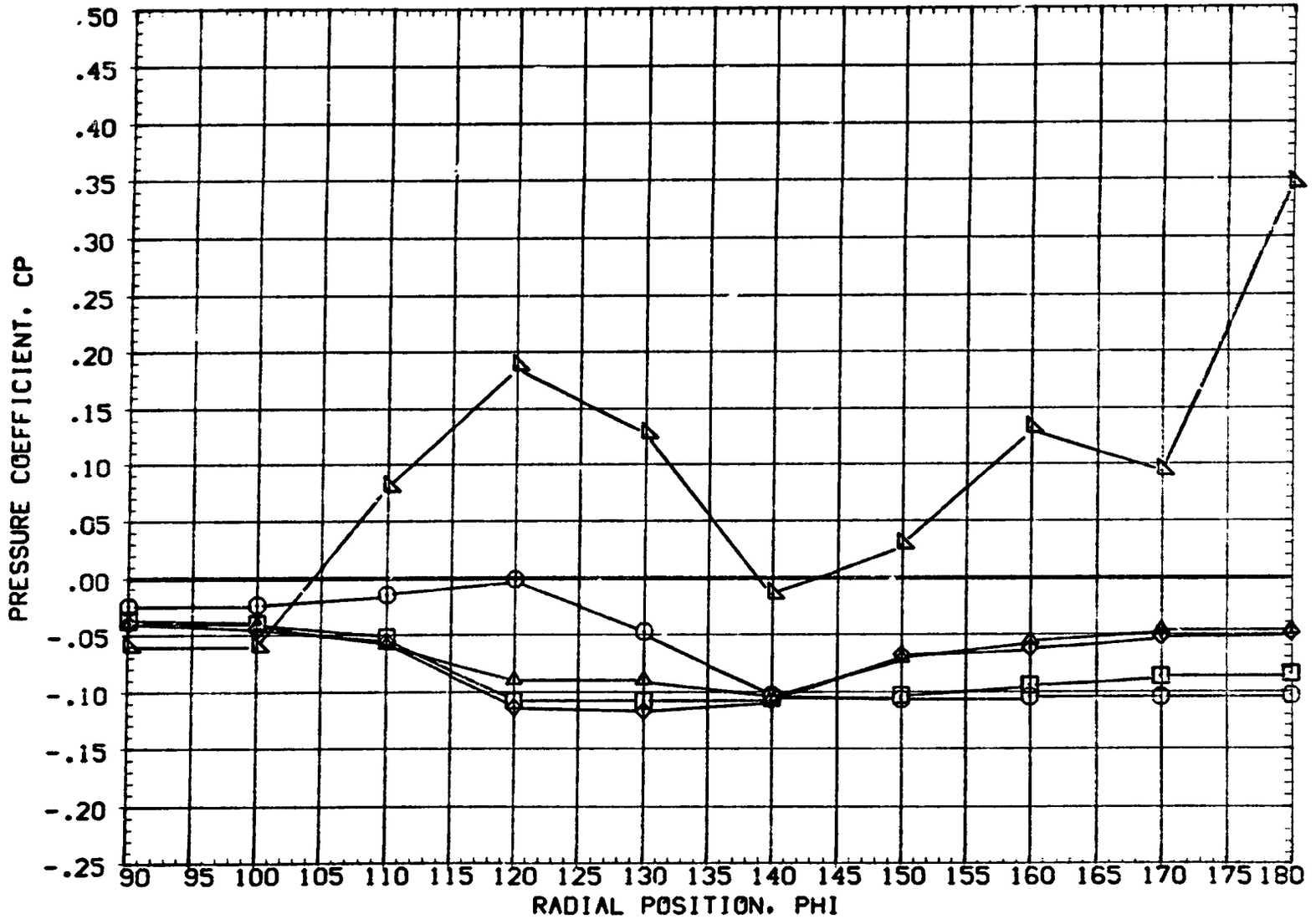
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
○	.264	12.010	2.950
□	.405		
◇	.546		
△	.688		
◁	.829		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



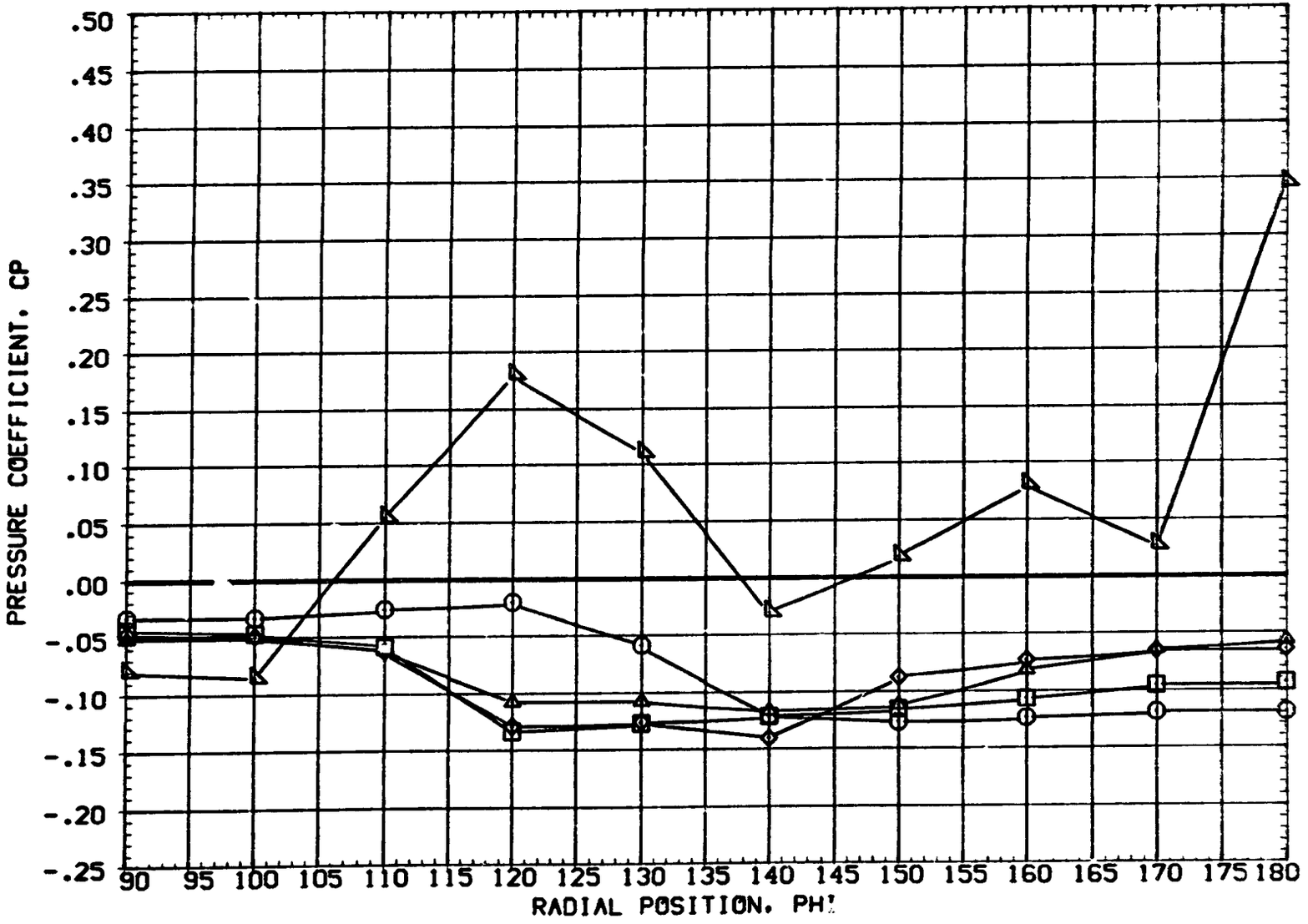
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
	.264	14.000	2.950
	.405		
	.546		
	.688		
	.829		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



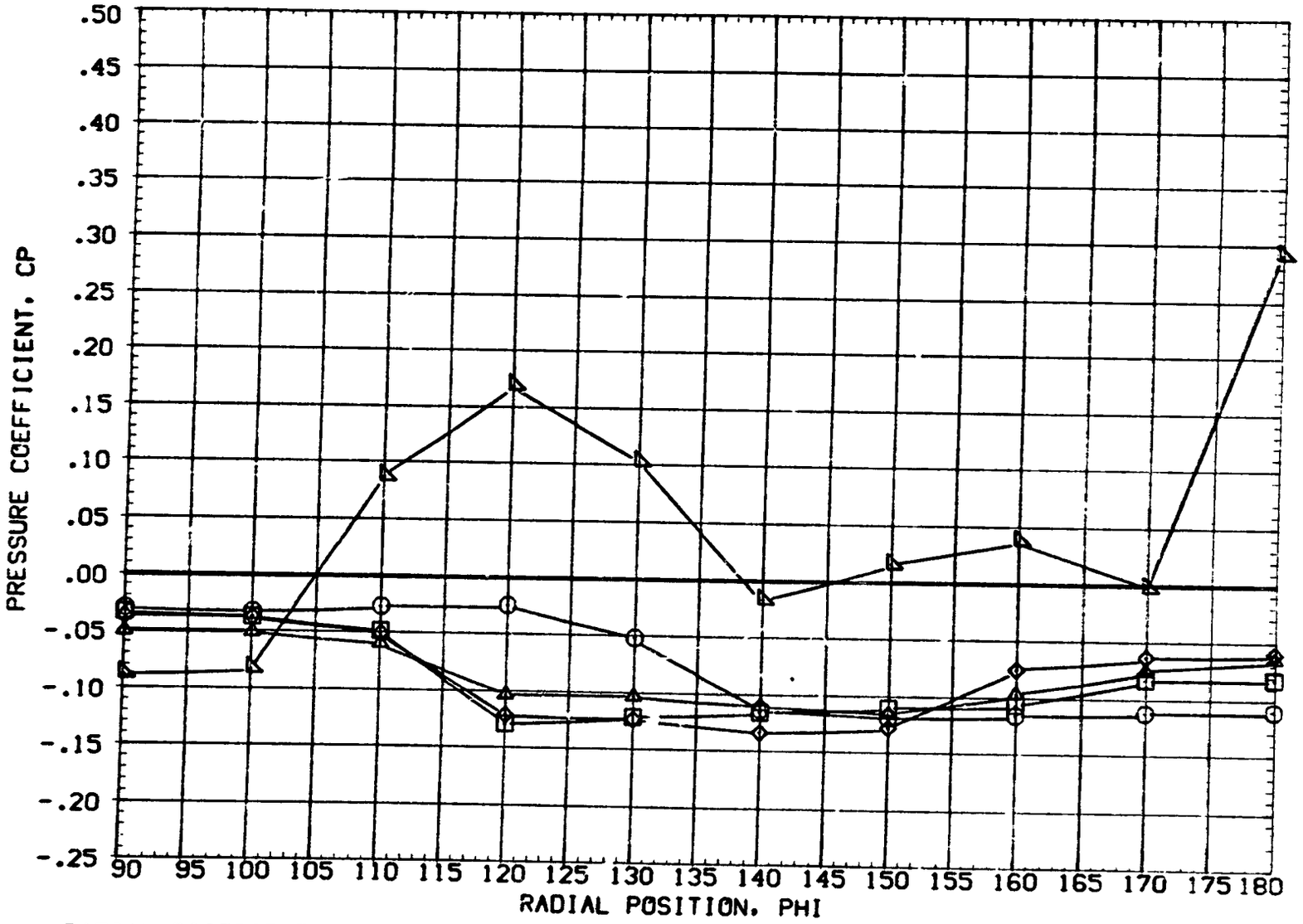
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
○	.264	16.010	2.950
□	.405		
◇	.546		
△	.688		
▽	.829		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

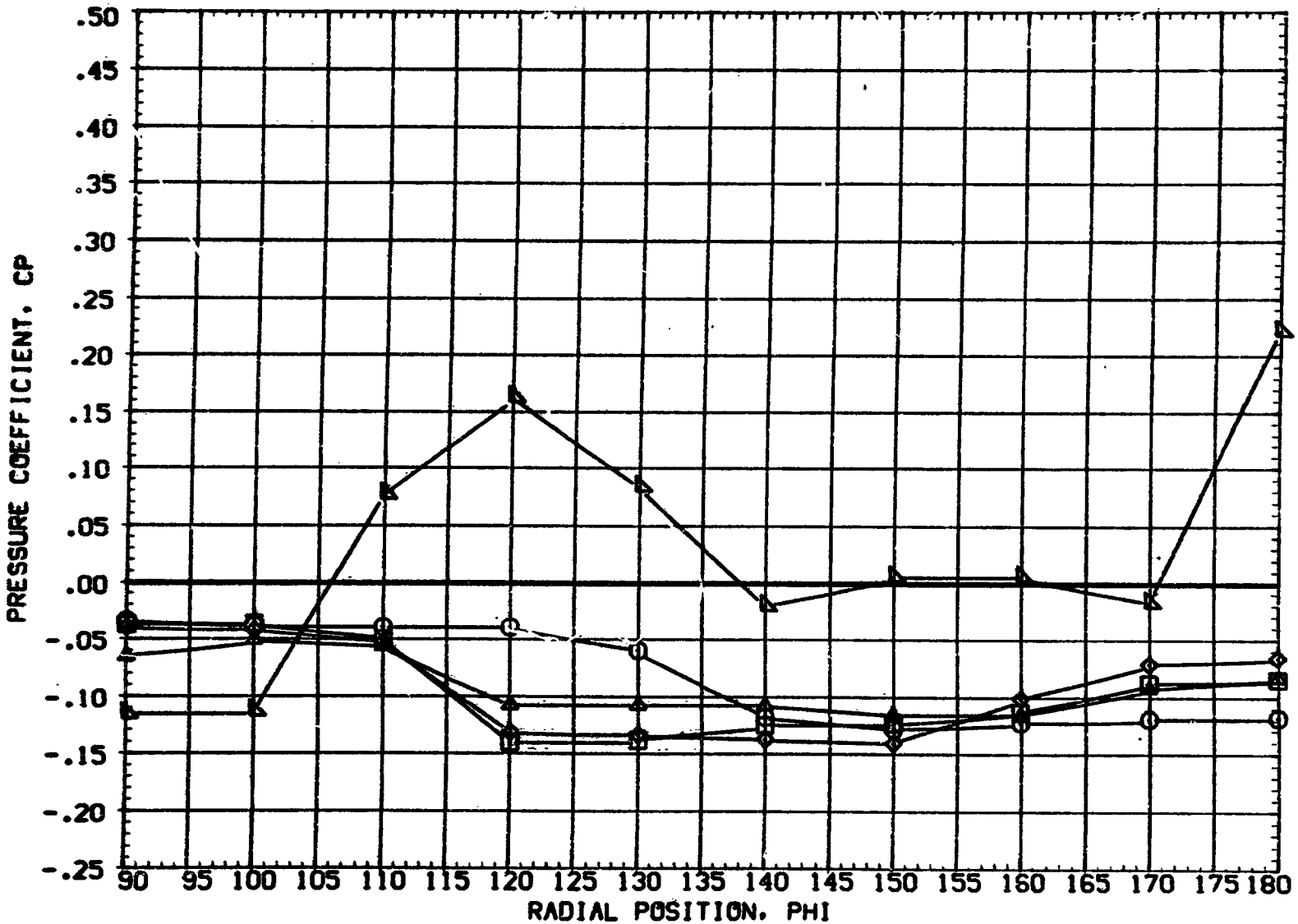


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (P940C4)

SYMBOL	X/L	ALPHA	MACH
□	.264	18.000	2.950
◇	.405		
△	.546		
○	.698		
▽	.829		

PARAMETRIC VALUES
BETA .000 ELEVON [illegible]



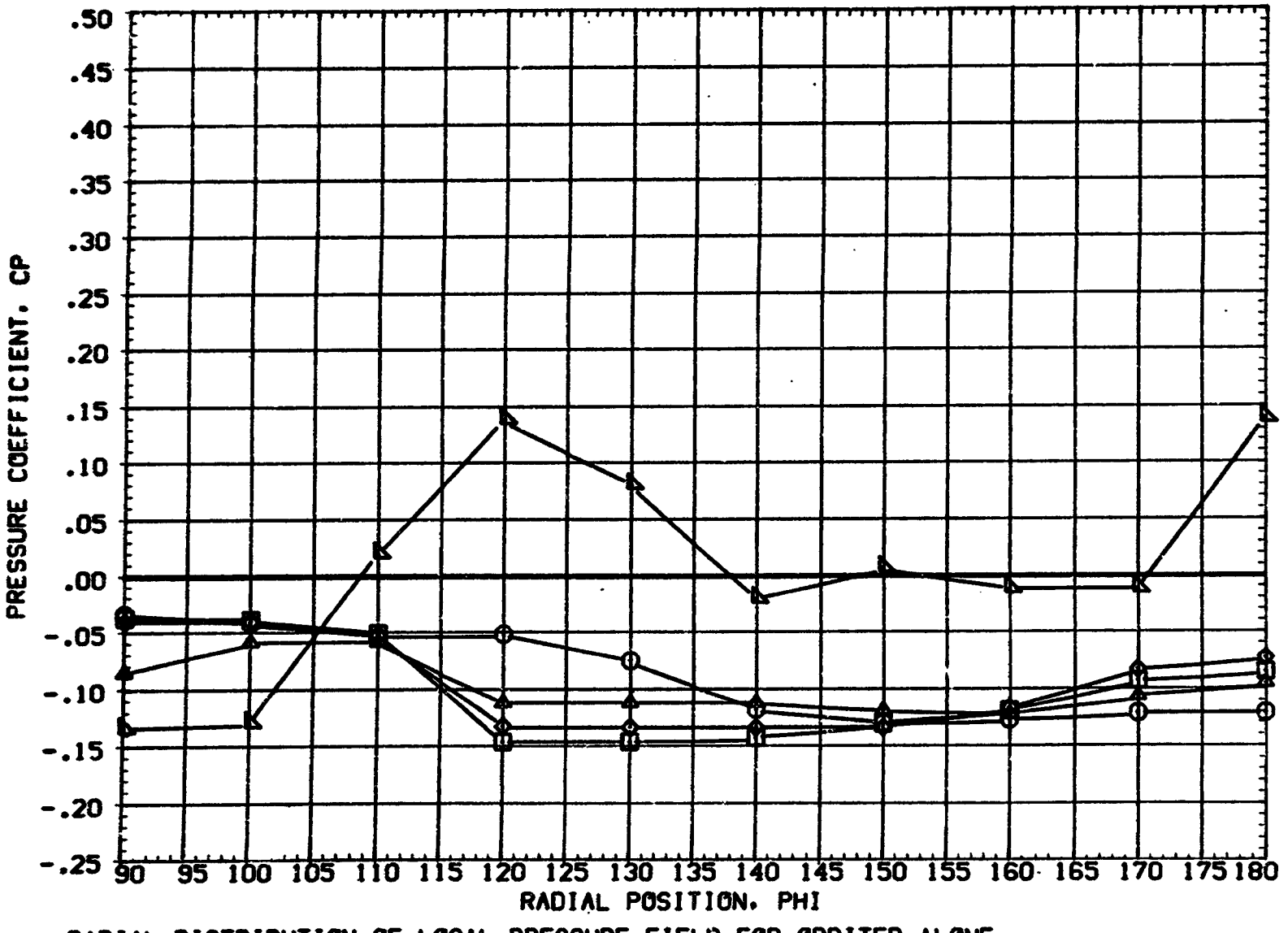
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
○	.264	20.000	2.950
□	.405		
◇	.546		
△	.688		
▽	.829		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

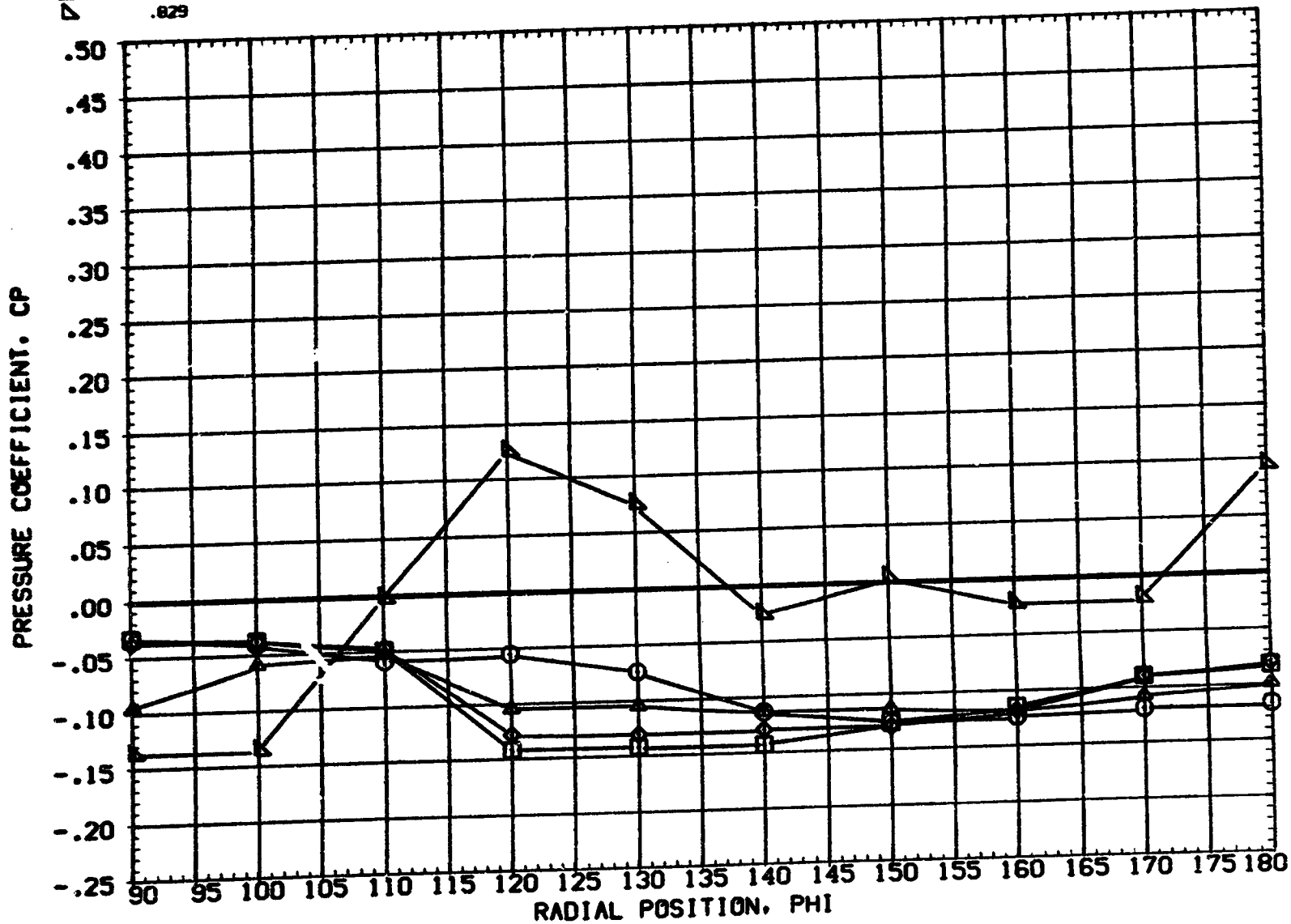


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

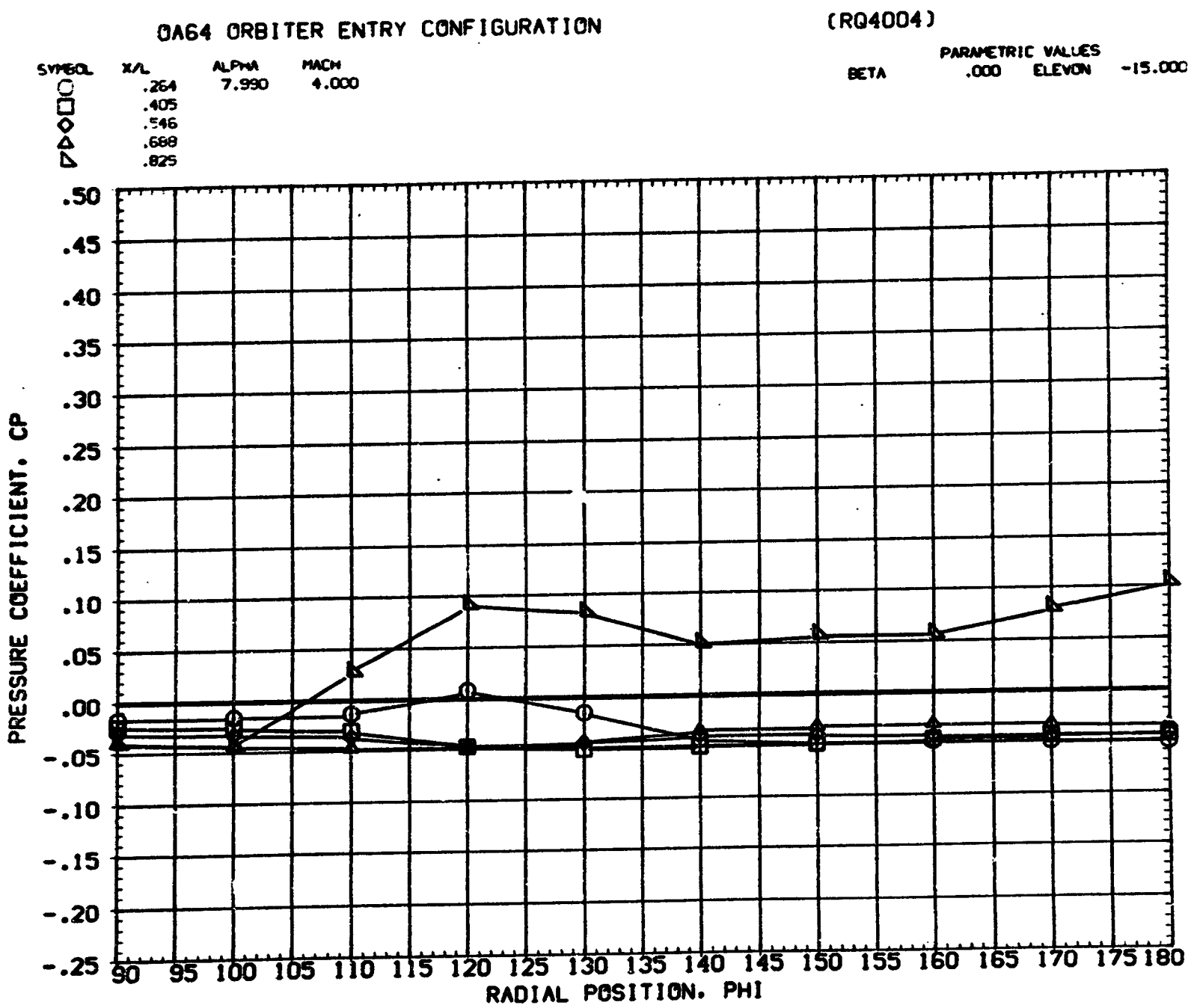
OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
▽	.264	20.950	2.950
△	.405		
◇	.546		
□	.688		
○	.829		

PARAMETRIC VALUES
BETA .000 ELEVON -15.000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

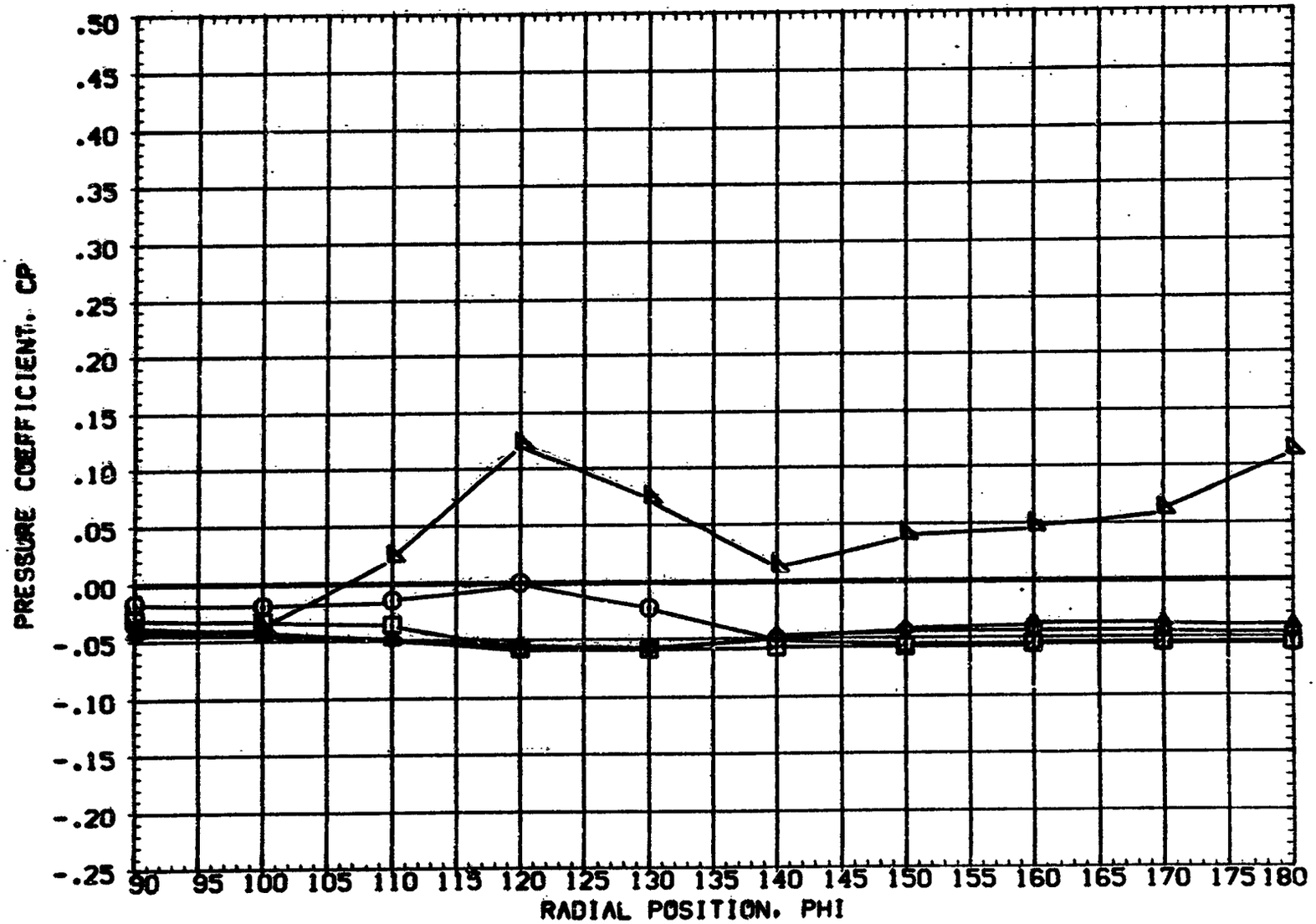


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
○	.264	10.000	4.000
□	.405		
◇	.546		
△	.688		
▽	.829		

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

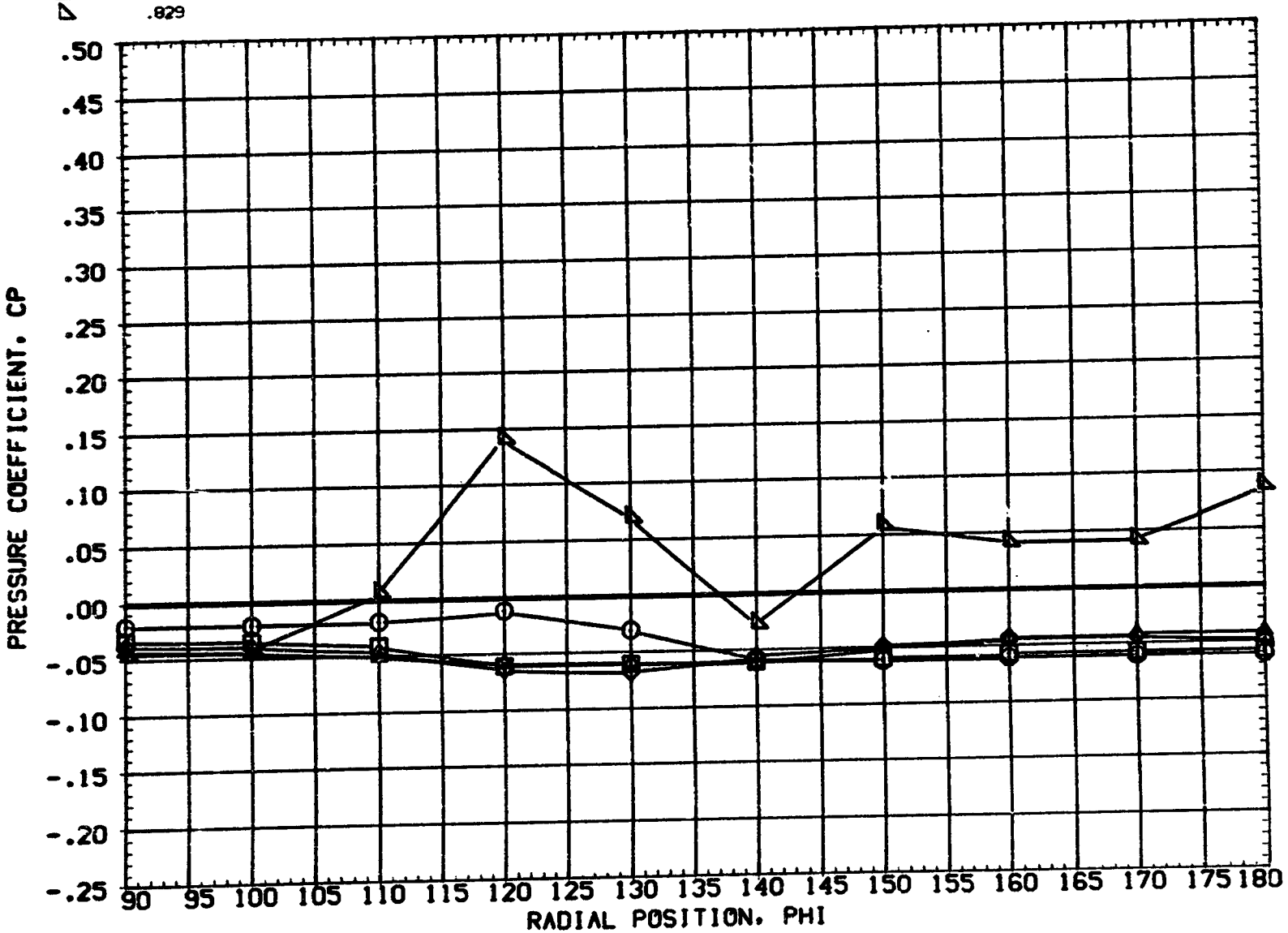


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

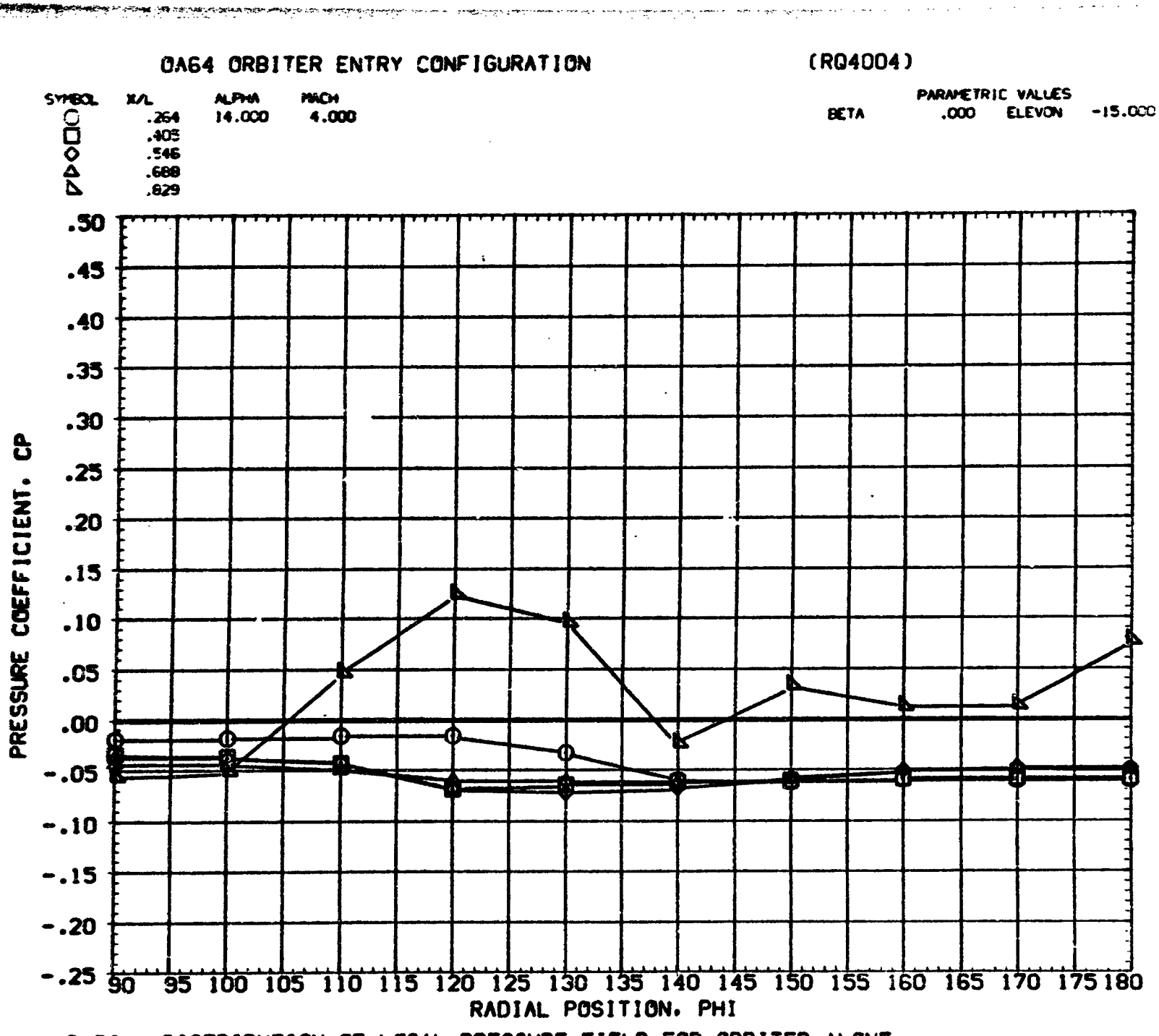
OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
▽△◇□○	.264	12.010	4.000
	.405		
	.546		
	.688		
▽	.829		

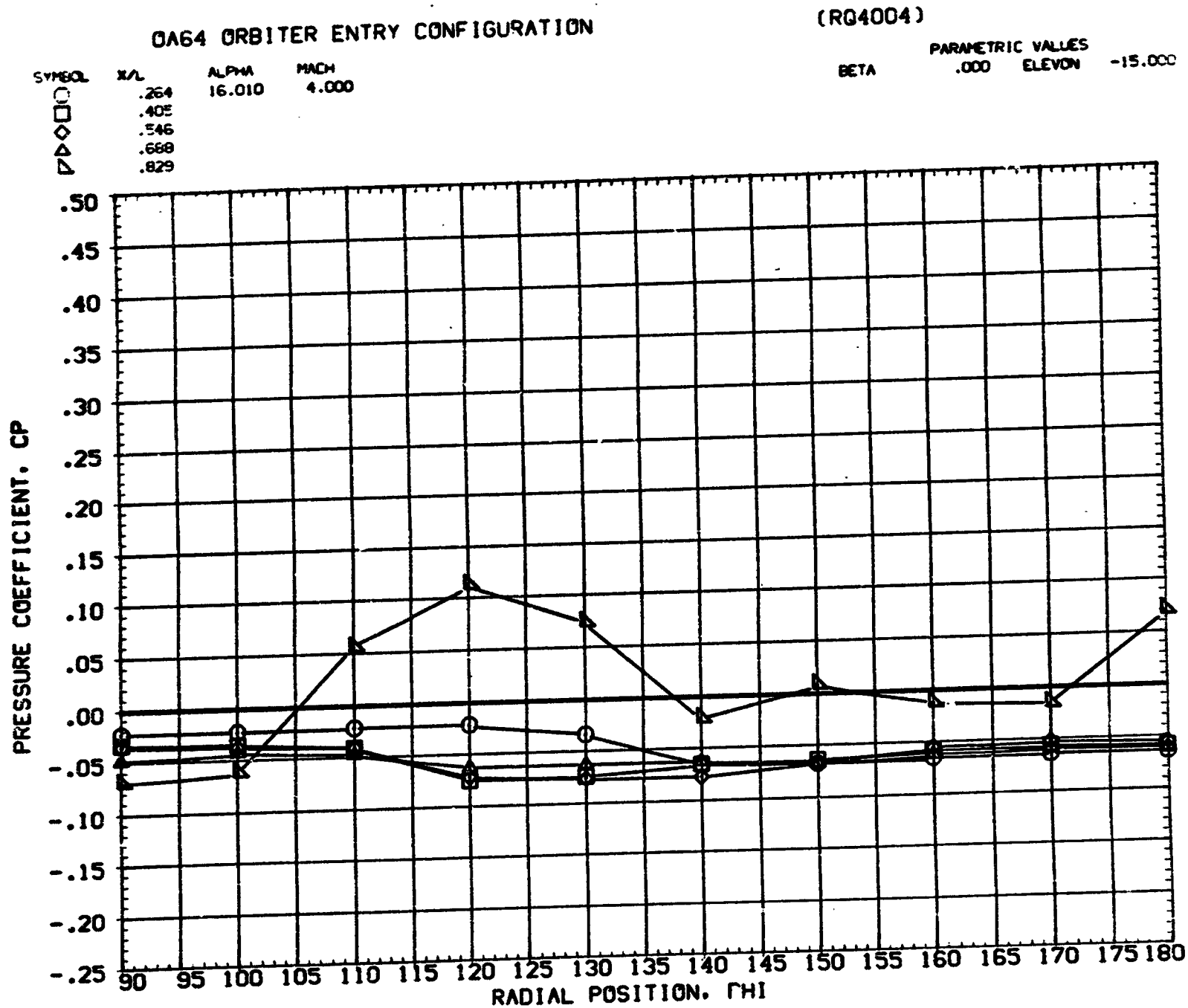
PARAMETRIC VALUES
BETA .000 ELEVON -15.000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

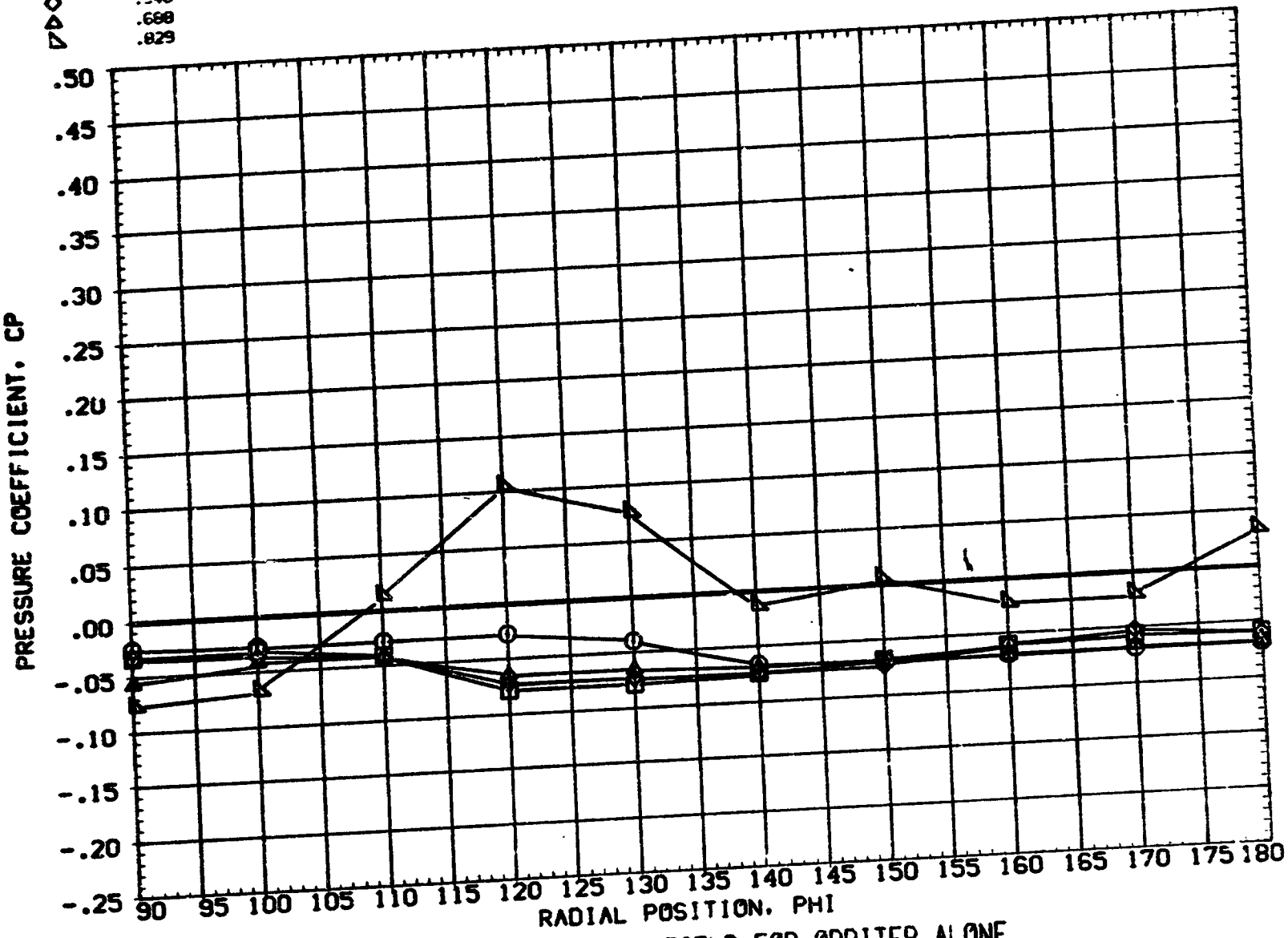
(RQ4004)

OA64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
▽	.264	18.010	4.000
△	.405		
◇	.546		
○	.688		
□	.829		

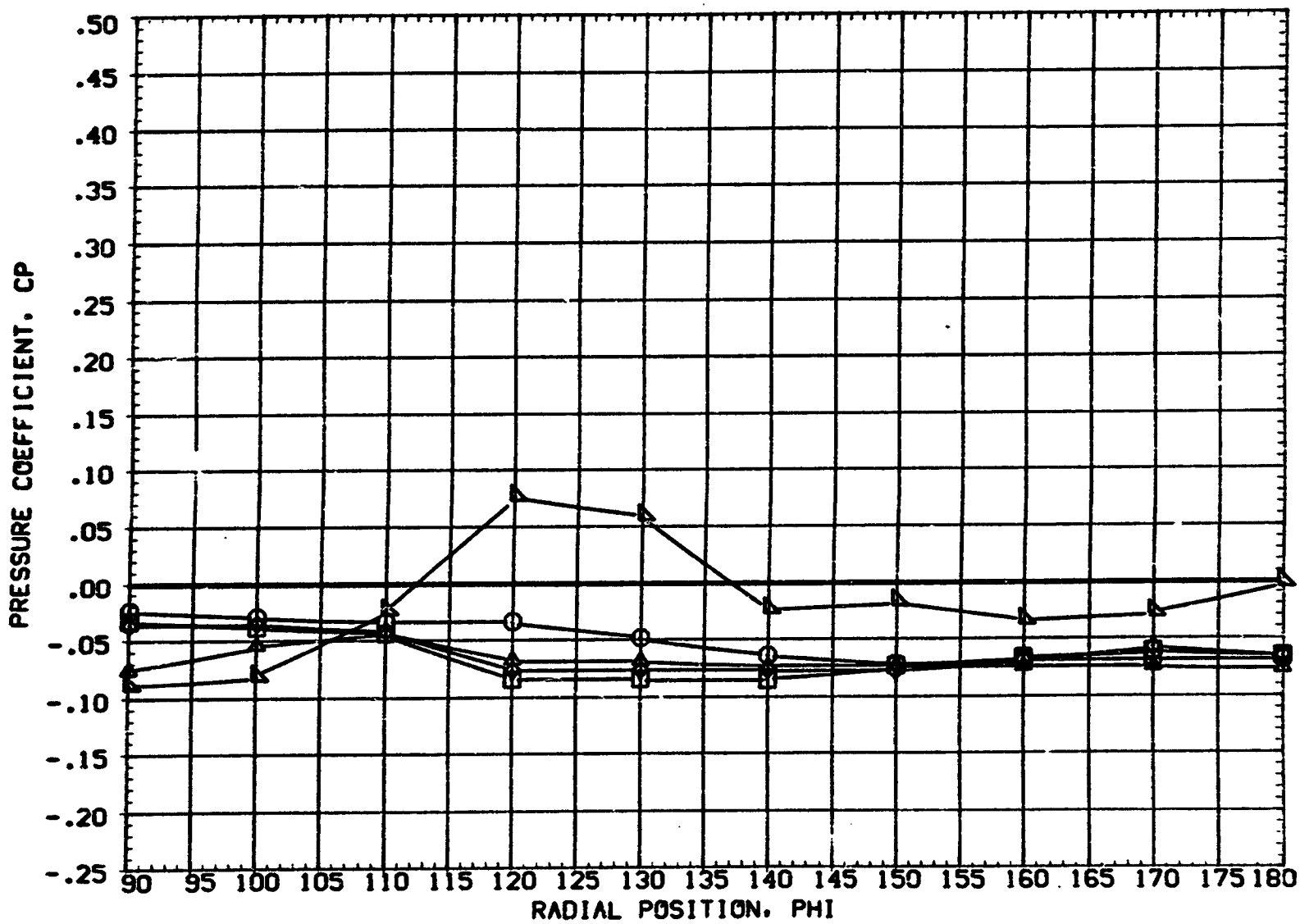


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
○	.264	20.000	4.000
□	.405		
◇	.546		
▷	.688		
△	.829		

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

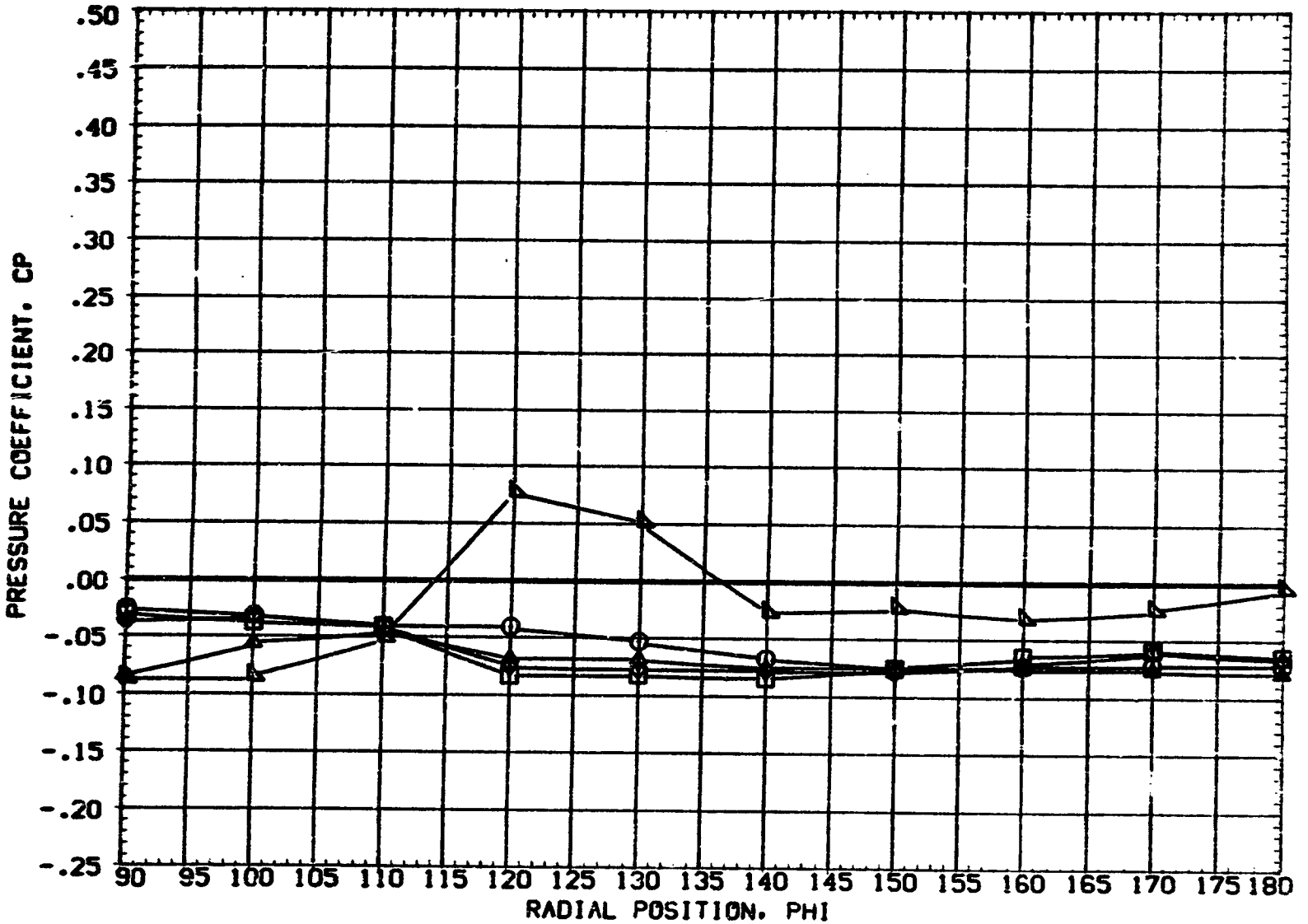


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

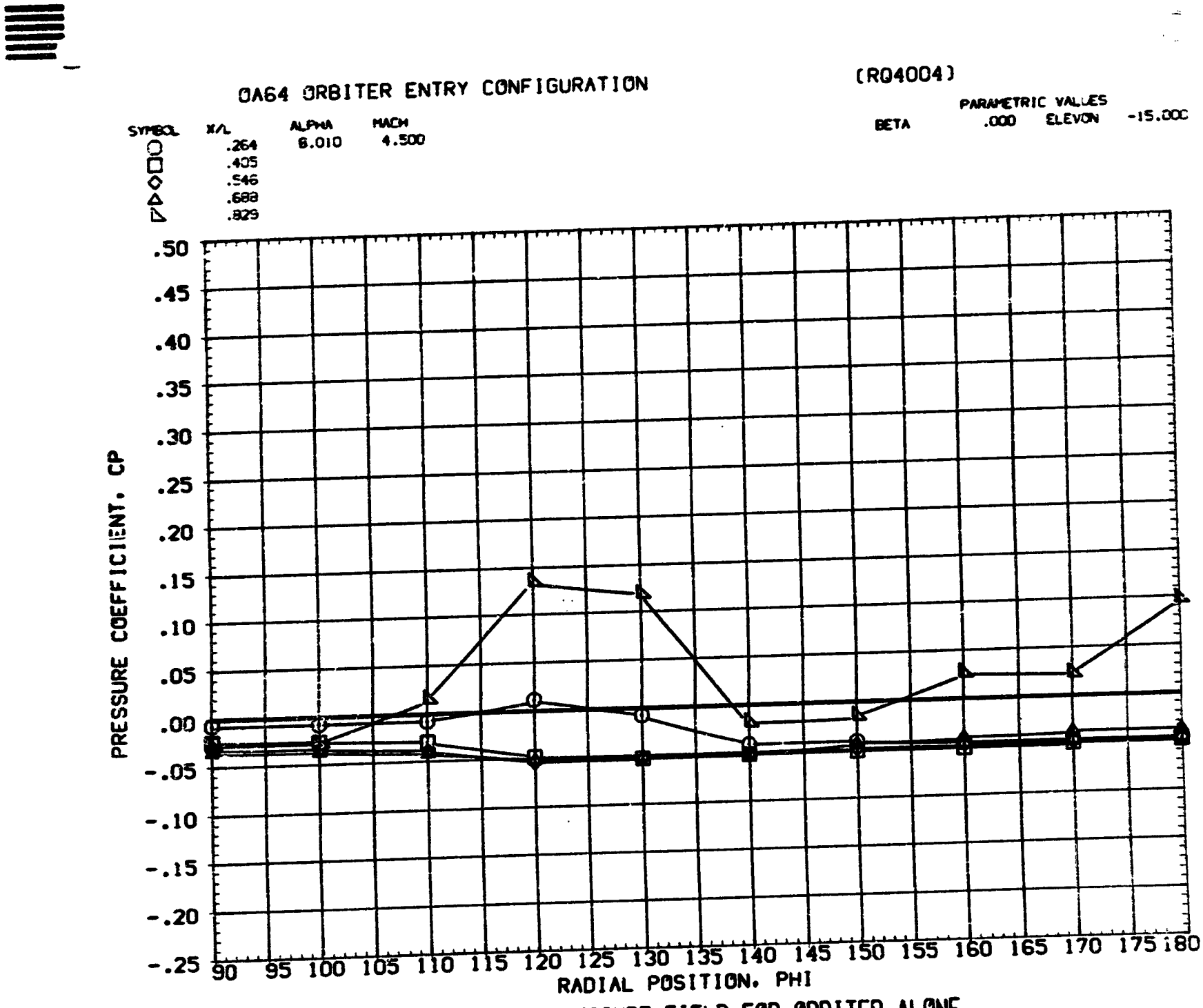
OA64 ORBITER ENTRY CONFIGURATION (RJ4004)

SYMBOL	X/L	ALPHA	MACH
○	.264	20.970	4.000
□	.405		
◇	.546		
△	.688		
▽	.829		

PARAMETRIC VALUES
BETA .000 ELEVON -15.000



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

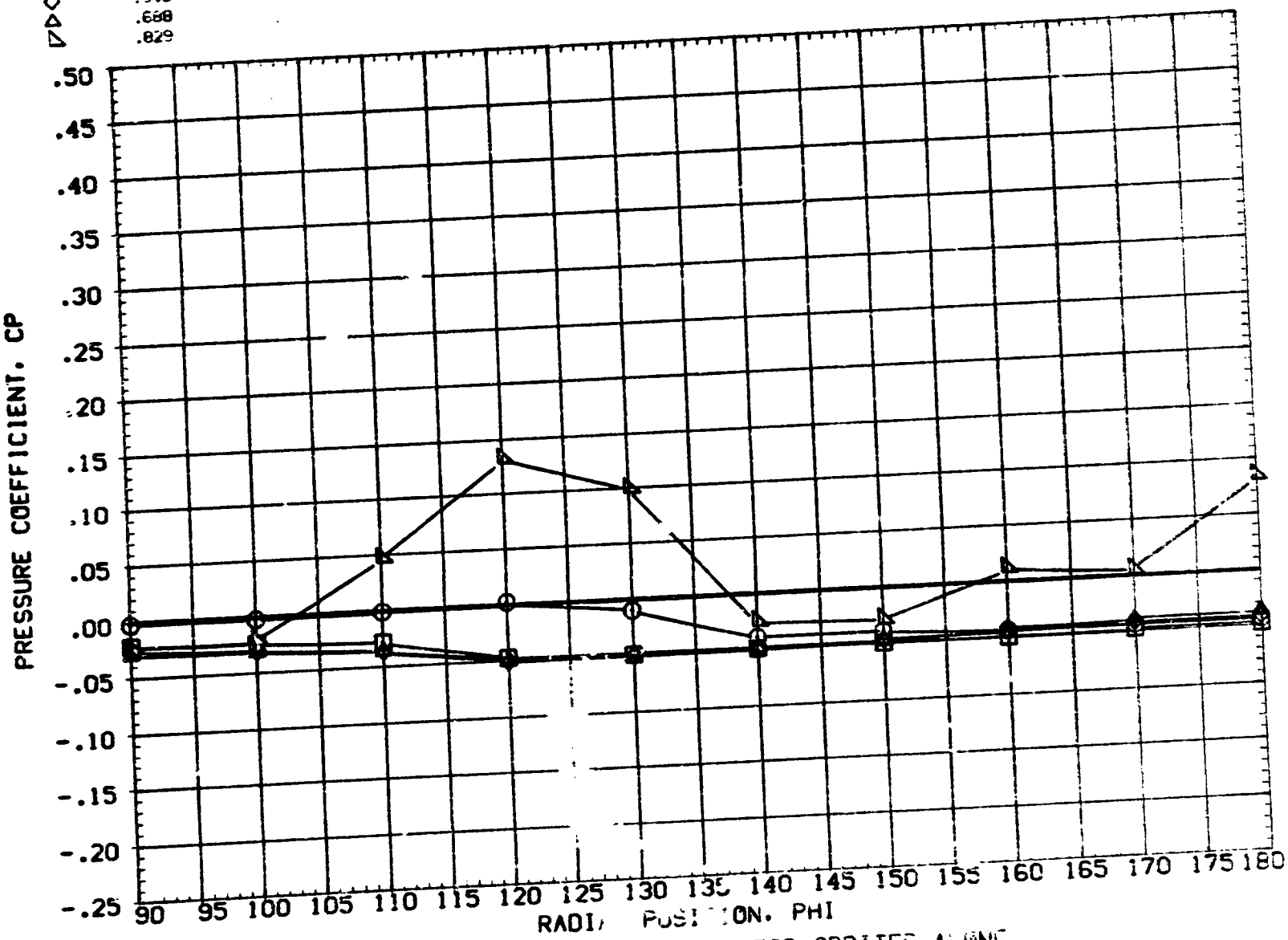


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

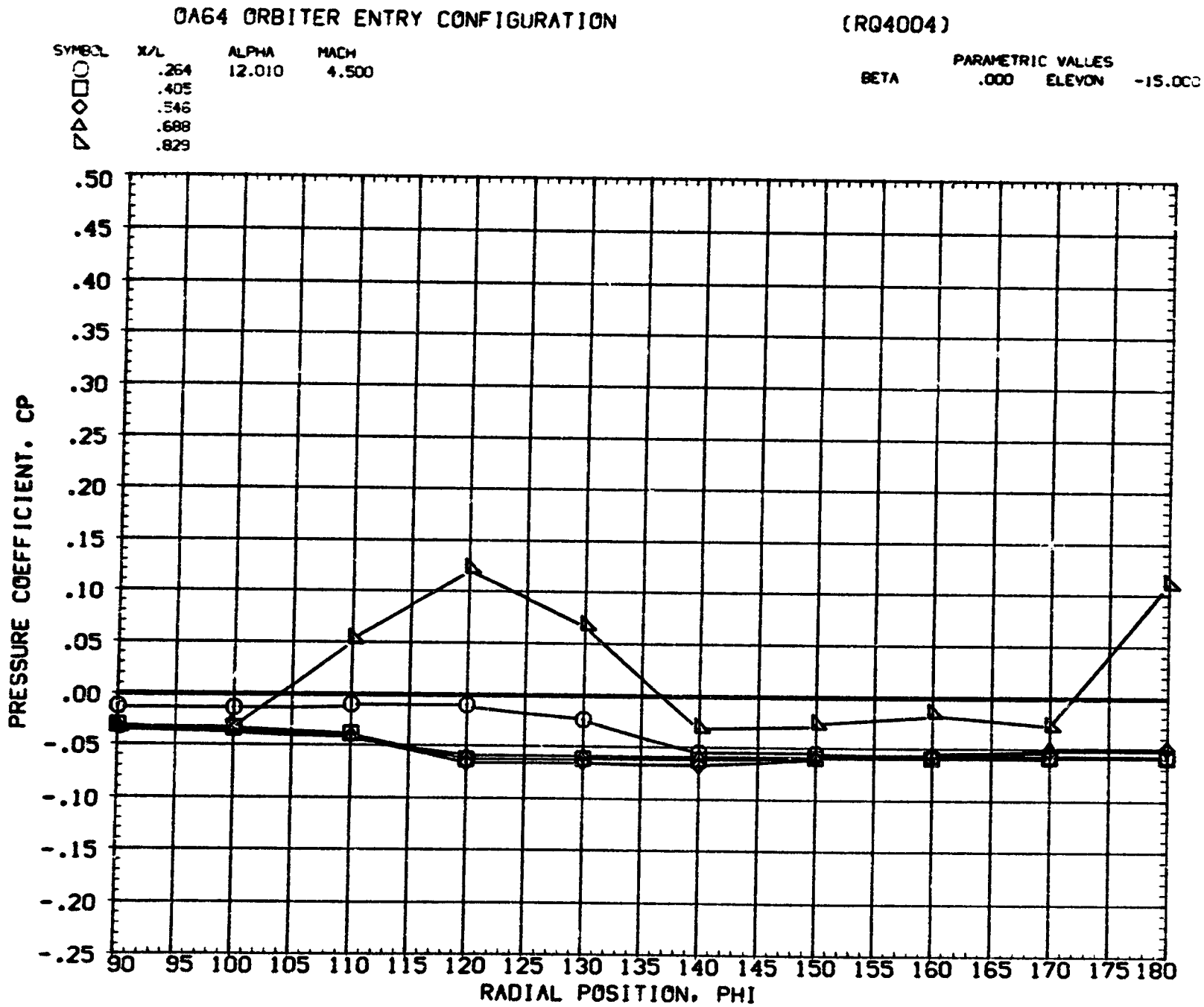
OA64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
▽	.264	10.000	4.500
◇	.405		
△	.546		
□	.688		
○	.829		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE



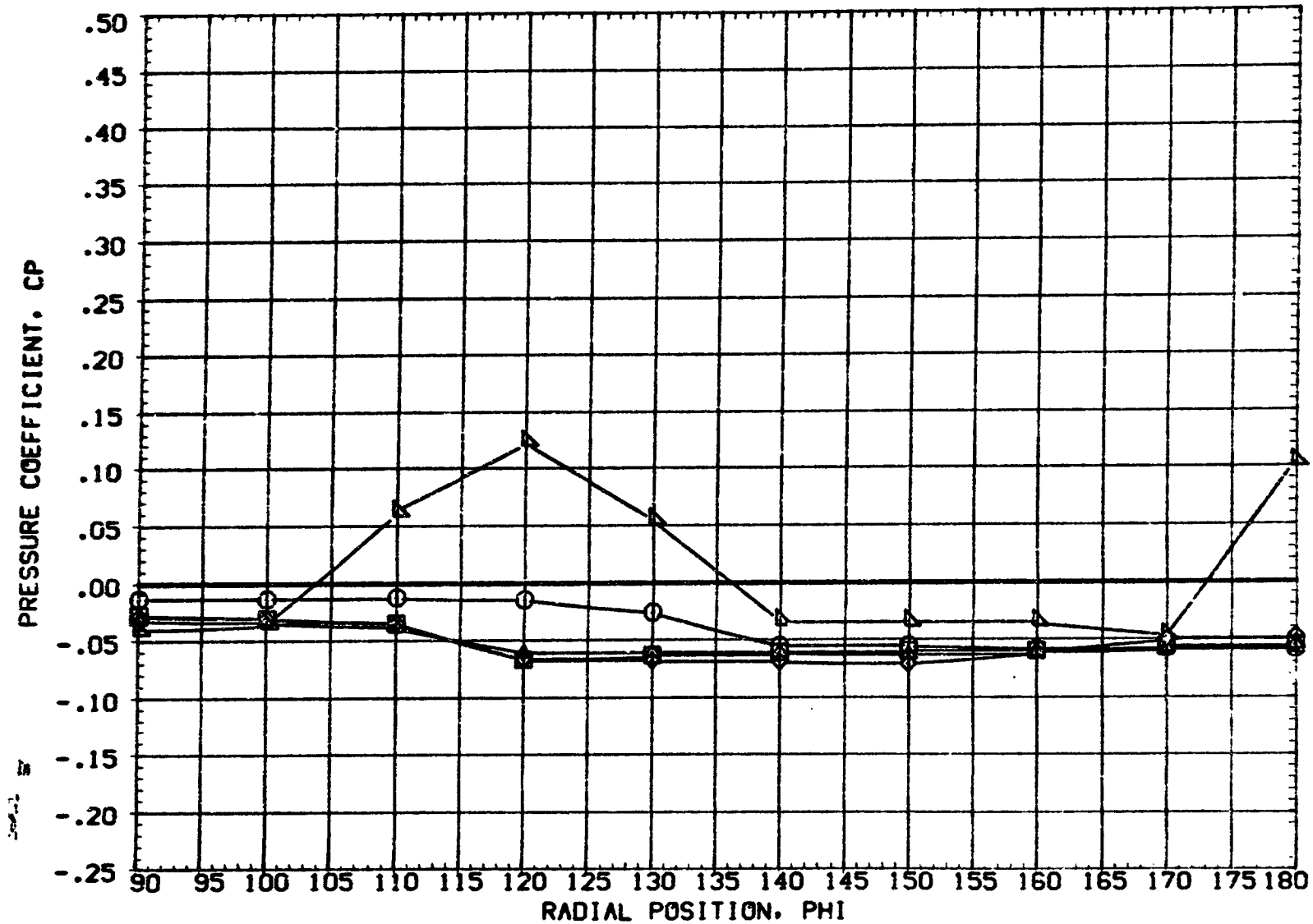
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

SYMBOL	X/L	ALPHA	MACH
○	.264	14.010	4.500
□	.403		
◇	.546		
△	.688		
▽	.829		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000



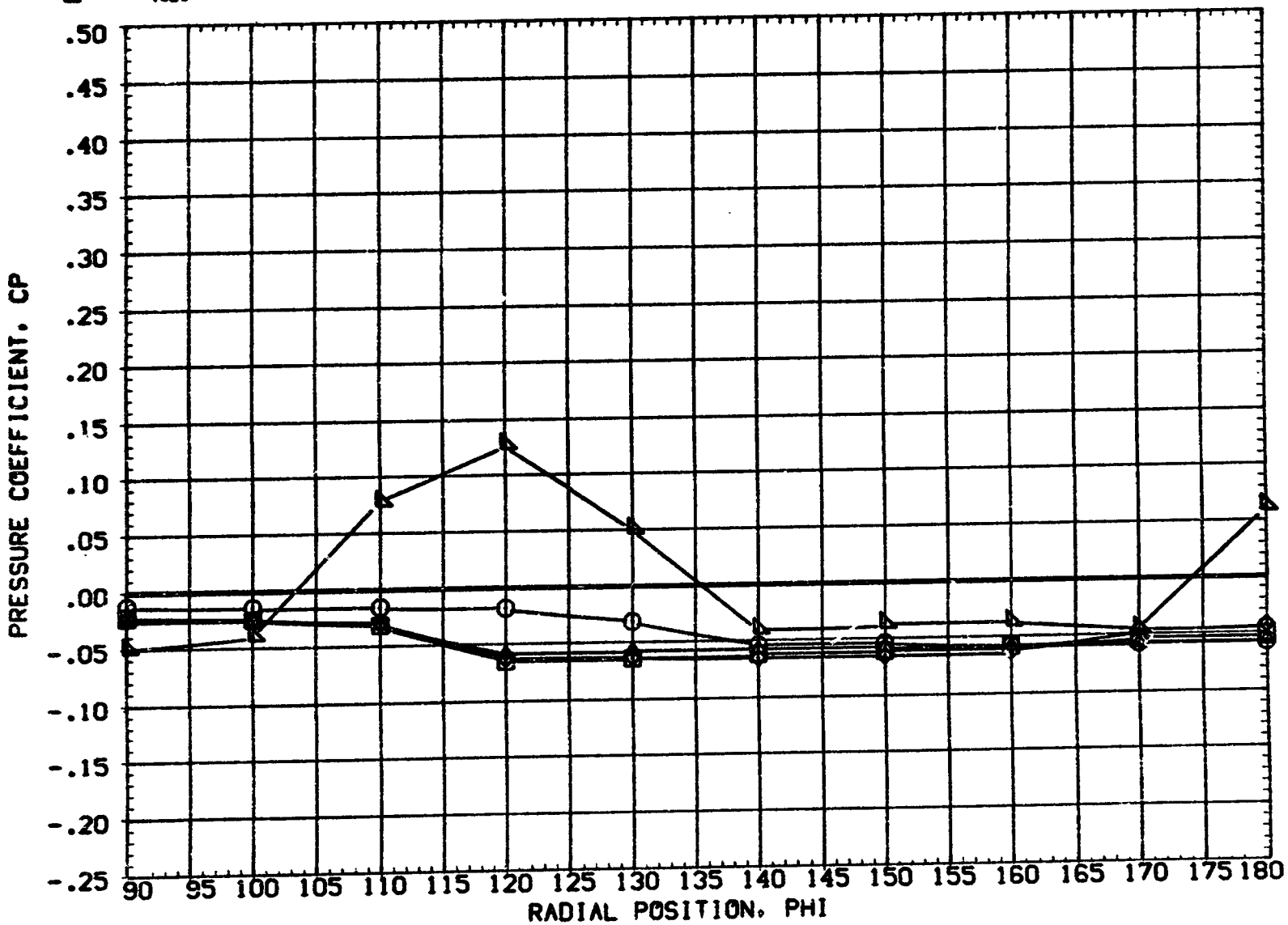
RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

SYMBOL	X/L	ALPHA	MACH
○	.264	16.000	4.500
□	.405		
◇	.546		
▷	.688		
△	.829		

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

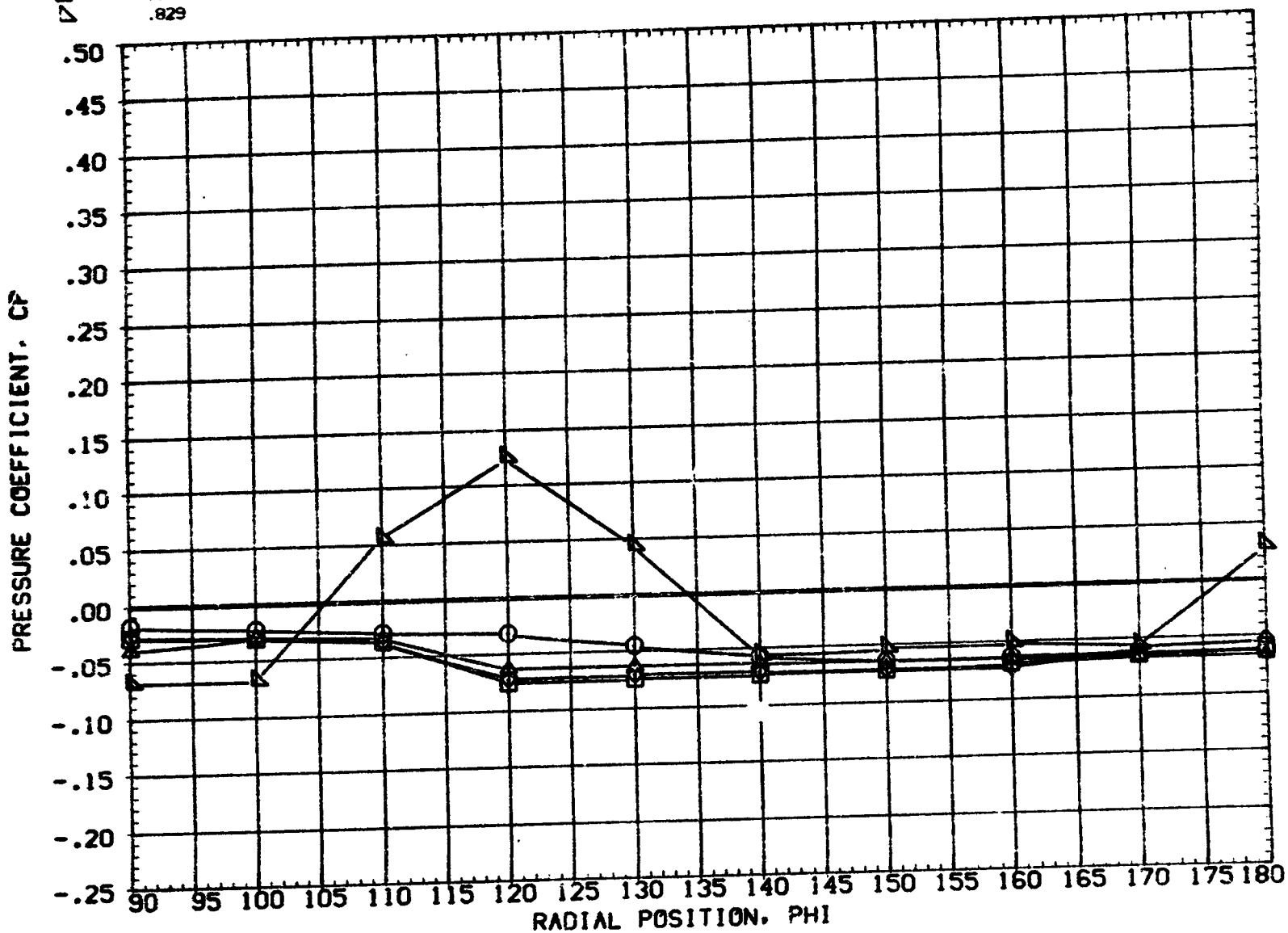


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

PARAMETRIC VALUES

SYMBOL	X/L	ALPHA	MACH	BETA		ELEVON
□	.264	18.000	4.500	.000		-15.000
◇	.405					
△	.546					
◁	.688					
	.829					



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

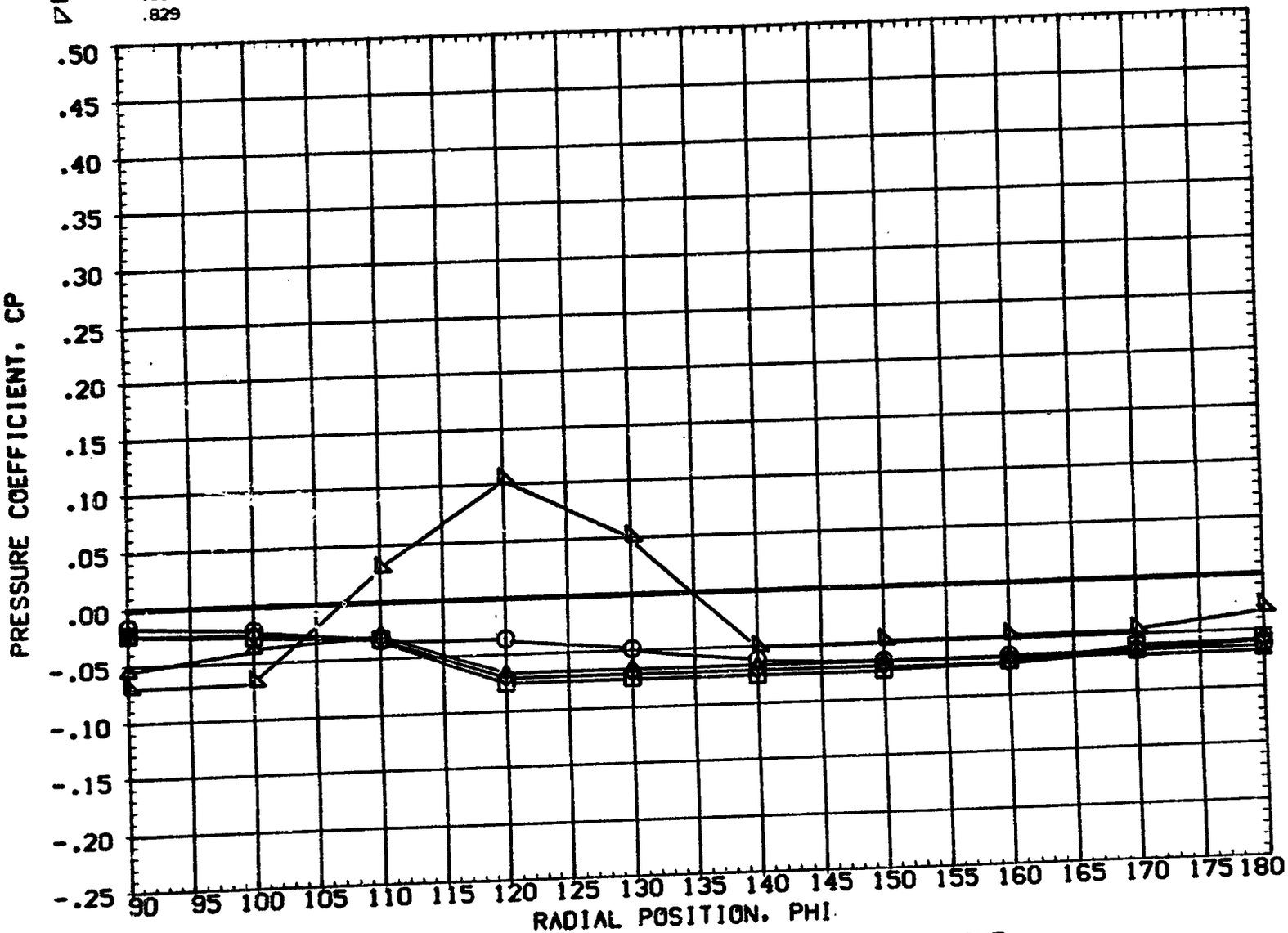
OA64 ORBITER ENTRY CONFIGURATION

(RQ4004)

PARAMETRIC VALUES

BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
	.264	19.990	4.500
	.405		
	.546		
	.688		
	.829		

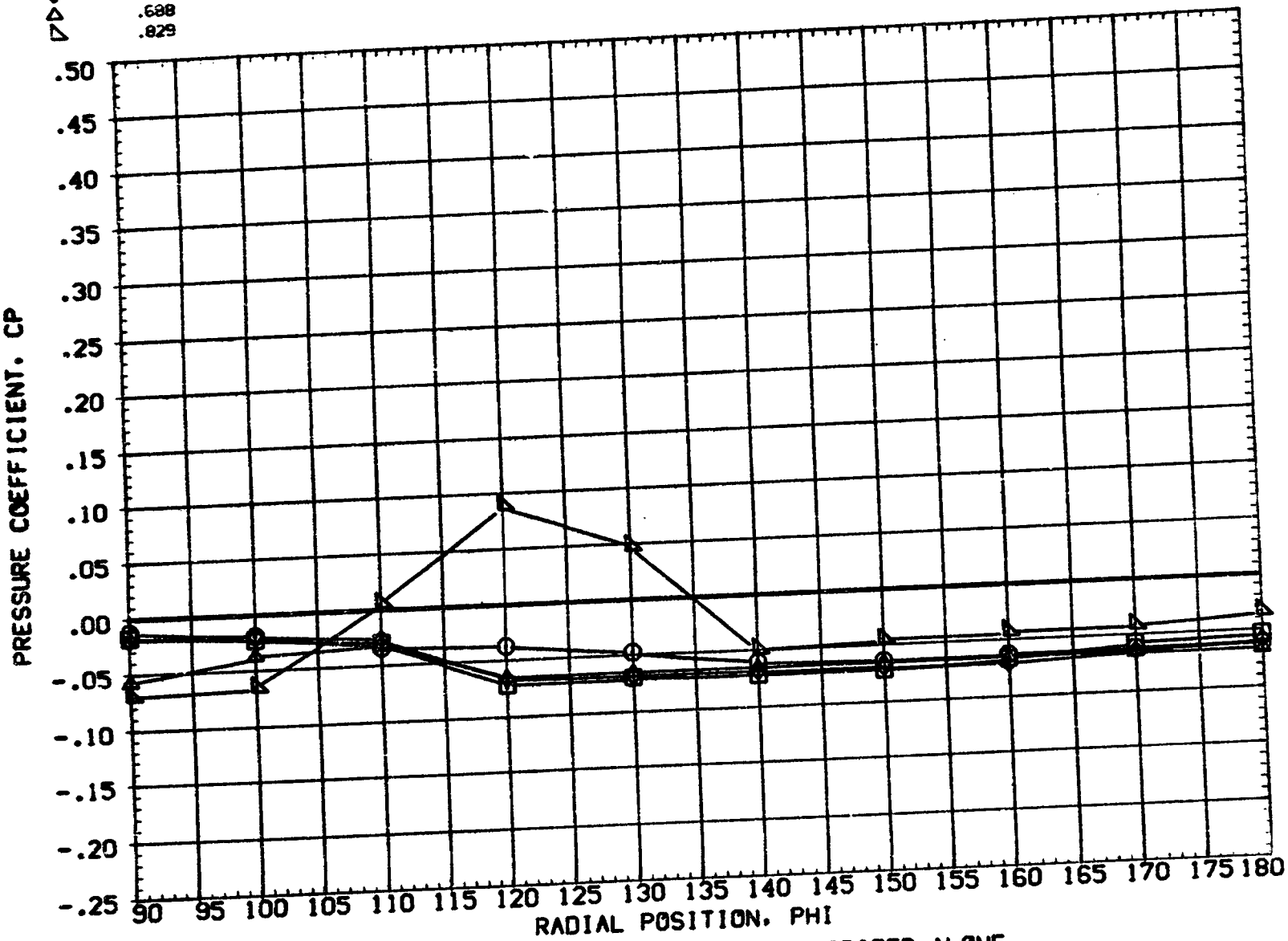


RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

OA64 ORBITER ENTRY CONFIGURATION

PARAMETRIC VALUES
BETA .000 ELEVON -15.000

SYMBOL	X/L	ALPHA	MACH
	.264	20.960	4.500
	.405		
	.546		
	.688		
	.829		



RADIAL DISTRIBUTION OF LOCAL PRESSURE FIELD FOR ORBITER ALONE

APPENDIX

TABULATED SOURCE DATA

IA35 ORBITER ASCENT CONFIGURATION (R69001) (03 JAN 74)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 IN.
LREF = .0000 IN. YMRP = .0000 IN.
BREF = .0000 IN. ZMRP = .0000 IN.
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = 6.000 ELEVON = .000

MACH (1) = 2.500 ALPHA (1) = -6.010 RN/L = 2.4984 BETA = 6.0300

SECTION (1):FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1640	.2050	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.1347	.1880	.1406												
70.000	.1494	.1680	.1397												
80.000	.2192	.1494	.1282												
90.000			.1068	.0849	.0038	-.0394	-.0416	-.0525	-.0816	-.0881	-.0843	-.0489	-.0537	-.0537	-.0508
100.000						-.1088	-.1015	-.0770	-.0816	-.0892	-.0879	-.0570	-.0422	-.0431	-.0583
110.000						-.1242	-.1233	-.1287	-.1369	-.1360	-.1224	-.0998	-.0777	-.0804	-.0422
120.000						-.0296								-.0739	
130.000						-.0461								-.0518	
140.000						-.0589								-.0258	
150.000						-.0471								.0011	
160.000						-.0471								.0193	
170.000						-.0371								.0270	
180.000						-.0280	-.0144	.0029	.0128	.0274	.0910	.0299	.0908	.0299	.0318

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6900	.7100
PHI															
90.000	-.0441	-.0374	-.0328	-.0258	-.0182	-.0114	-.0055	-.0017	.0029	.0083	.0119	.0201	-.0117	.0285	.0301
100.000	-.0384	-.0345	-.0355	-.0364	-.0365	-.0364	-.0325	-.0280	-.0235	-.0189	-.0098	.0020	-.0017	.0029	.0030
110.000	-.0409	-.0398	-.0412	-.0422	-.0422	-.0824	-.0343	-.0334	-.0307	-.0298	-.0107	-.0280	-.0017	-.0189	-.0079
120.000						-.0748								-.0380	
130.000						-.0452								-.0353	
140.000						-.0307								-.0244	
150.000						-.0126								-.0238	
160.000						-.0017								-.0162	
170.000						.0110								-.0089	
180.000	.0318	.0318	.0308	.0289	.0251	.0219	.0201	.0185	.0147	-.0198	.0110	-.0198	-.0055	.0020	-.0034

X/L	.7280	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0572		
70.000							.0696	.0585	.0256
80.000							.0704	.0407	.0138
90.000	.0847	.0111	.0075	-.0006	.0088	.0991	.0407	.0048	-.0251
100.000	-.0115	-.0097	-.0088	-.0097	.0572	.0806			
110.000	-.0106	-.0054	.0048	.0347	.0739	.0425			
120.000						.0120			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA33/OM64 (LARC UPWT 1063) (R03001)

IA33 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.900 ALPHA (1) = -6.010

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7870	.7950	.8050	.8290	.8620	.9000	.9400
PHI									
130.000						.2091			
140.000						.4082			
150.000						.4369			
160.000						.2864			
170.000						.2315			
180.000	.0079	-.0090	-.0006	.0050	.2305	.4578			

MACH (1) = 2.900 ALPHA (2) = -3.980 RN/L = 2.4964 BETA = 6.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0070	.1280	.1640	.2050	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3790	.3940	.4090	.4310
PHI															
60.000	.1454	.1454	.1198												
70.000	.1257	.1418	.1221												
80.000	.1040	.1407	.1242												
90.000			.1069	.0874	-.0070	-.0978	-.0908	-.0826	-.0645	-.0806	-.0589	-.0654	-.0715	-.0886	-.0878
100.000						-.0988	-.0941	-.0691	-.0654	-.0728	-.0654	-.0543	-.0579	-.0828	-.0998
110.000						-.1256	-.1258	-.1331	-.1414	-.1425	-.1294	-.1027	-.0784	-.0706	-.0579
120.000						-.0413								-.0825	
130.000						-.0617								-.0697	
140.000						-.0784								-.0432	
150.000						-.0882								-.0198	
160.000						-.0826								-.0082	
170.000						-.0808								-.0013	
180.000						-.0808	-.0589	-.0800	-.0070	.0014	.0025	.0006	.0008	.0006	-.0005

X/L	.4500	.4680	.4880	.5050	.5240	.5480	.5810	.5800	.5980	.6170	.6360	.6540	.6730	.6860	.7100
PHI															
80.000	-.0803	-.0850	-.0401	-.0413	-.0384	-.0545	-.0289	-.0253	-.0216	-.0152	-.0068	-.0059	-.0179	.0107	.0074
100.000	-.0840	-.0491	-.0442	-.0432	-.0432	-.0432	-.0419	-.0401	-.0373	-.0318	-.0068	-.0059	-.0124	-.0068	-.0089
110.000	-.0850	-.0491	-.0401	-.0471	-.0471	-.0510	-.0486	-.0475	-.0484	-.0484	-.0486	-.0486	-.0124	-.0592	-.0527
120.000						-.0588								-.0540	
130.000						-.0429								-.0484	
140.000						-.0447								-.0327	
150.000						-.0527								-.0281	
160.000						-.0207								-.0336	
170.000						-.0115								-.0290	
180.000	.0088	.0050	.0049	.0056	-.0015	-.0050	-.0059	-.0068	-.0105	-.0124	-.0527	-.0207	-.0189	-.0216	-.0208

X/L	.7290	.7470	.7870	.7950	.8050	.8290	.8620	.9000	.9400
PHI									

IA35 ORBITER ASCENT CONFIGURATION (R85001)

MACH (1) = 2.500 ALPHA (2) = -3.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8050	.8250	.8620	.9000	.9400
PHI									
60.000							.0092		
70.000							.0375	.0220	-.0045
80.000							.0479	.0129	-.0108
90.000	.0028	-.0089	-.0181	-.0154	-.0127	.0582	.0256	-.0099	-.0363
100.000	-.0080	-.0218	-.0172	-.0181	.0201	.0573			
110.000	-.0584	-.0272	-.0172	.0295	.0505	.0229			
120.000						-.0017			
130.000						.1756			
140.000						.3649			
150.000						.3825			
160.000						.2498			
170.000						.2020			
180.000	-.0172	-.0181	-.0172	-.0181	.1956	.3922			

MACH (1) = 2.500 ALPHA (3) = -2.000 RN/L = 2.4984 BETA = 0.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1250	.1640	.2050	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4	.4310
PHI															
60.000	.1504	.1389	.1369												
70.000	.1204	.1369	.0988												
80.000	.1988	.1388	.0986												
90.000			.0885	.0471	-.0288	-.0592	-.0702	-.0748	-.0801	-.0564	-.0856	-.0711	-.0758	-.0739	-.0729
100.000						-.0942	-.0896	-.0822	-.0794	-.0767	-.0810	-.0658	-.0709	-.0739	-.0690
110.000						-.1236	-.1284	-.1356	-.1430	-.1448	-.1356	-.1091	-.0876	-.0798	-.0680
120.000						-.0435								-.0805	
130.000						-.0883								-.0798	
140.000						-.0906								-.0582	
150.000						-.0831								-.0567	
160.000						-.0785								-.0289	
170.000						-.0787								-.0240	
180.000						-.0884	-.0984	-.0417	-.0525	-.0830	-.0253	-.0240	-.0240	-.0249	-.0249

X/L	.4500	.4680	.4880	.5090	.5240	.5480	.5810	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
80.000	-.0880	-.0831	-.0982	-.0983	-.0933	-.0933	-.0812	-.0493	-.0486	-.0401	-.0909	-.0225	-.0458	-.0105	-.0121
100.000	-.0821	-.0963	-.0914	-.0884	-.0471	-.0484	-.0486	-.0493	-.0909	-.0312	-.0484	-.0281	-.0973	-.0272	-.0256
110.000	-.0831	-.0963	-.0939	-.0904	-.0494	-.0494	-.0489	-.0493	-.0521	-.0549	-.0521	-.0549	-.0564	-.0484	-.0423
120.000						-.0535								-.0613	
130.000						-.0498								-.0549	
140.000						-.0549								-.0429	
150.000						-.0475								-.0392	

IA39 ORBITER ASCENT CONFIGURATION (RB3001)

MACH (1) = 2.500 ALPHA (2) = -2.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4900	.4980	.4980	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
160.000						-.0585								-.0456	
170.000						-.0509								-.0456	
180.000	-.0810	-.0820	-.0181	-.0800	-.0240	-.0255	-.0282	-.0290	-.0299	-.0319	-.0401	-.0493	-.0564	-.0410	-.0408

X/L	.7280	.7470	.7870	.7880	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0148		
70.000							.0182	-.0029	-.0277
80.000							.0257	-.0139	-.0852
90.000	-.0139	-.0287	-.0886	-.0822	-.0277	.0184	-.0058	-.0296	-.0468
100.000	-.0858	-.0813	-.0277	-.0277	.0045	.0182			
110.000	-.0482	-.0887	-.0277	.0100	.0529	.0083			
120.000						-.0095			
130.000						.1589			
140.000						.3292			
150.000						.3274			
160.000						.2087			
170.000						.1745			
180.000	-.0887	-.0887	-.0886	-.0886	.1857	.3177			

MACH (1) = 2.500 ALPHA (4) = .000 RN/L = 2.4984 BETA = 0.0000

SECTION (1)F WING DEPENDENT VARIABLE CP

X/L	.3870	.4480	.1040	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4080	.4310
PHI															
60.000	.1484	.1191	.1140												
70.000	.1282	.1126	.0918												
80.000	.1368	.1140	.0882												
90.000			.0884	.0836	-.0842	-.0845	-.0709	-.0836	-.0582	-.0881	-.0775	-.0828	-.0868	-.0868	-.0868
100.000						-.0865	-.0857	-.0819	-.0775	-.0854	-.0881	-.0775	-.0858	-.0868	-.0839
110.000						-.1204	-.1041	-.1341	-.1435	-.1470	-.1222	-.0819	-.0874	-.0865	-.0874
120.000						-.0518								-.0825	
130.000						-.0784								-.0878	
140.000						-.1011								-.0722	
150.000						-.0885								-.0526	
160.000						-.0911								-.0451	
170.000						-.0911								-.0431	
180.000						-.0829	-.0718	-.0809	-.0544	-.0480	-.0481	-.0470	-.0480	-.0441	-.0431

X/L	.4880	.4880	.4980	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															

IA35 ORBITER ASCENT CONFIGURATION (R0S001)

MACH (1) = 2.500 ALPHA (4) = .010

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4900	.4680	.4060	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6750	.6960	.7100
PHI															
90.000	-.0829	-.0780	-.0761	-.0722	-.0722	-.0722	-.0683	-.0683	-.0646	-.0581	-.0470	-.0386	-.0544	-.0305	-.0299
100.000	-.0781	-.0722	-.0683	-.0654	-.0645	-.0635	-.0618	-.0627	-.0627	-.0627	-.0479	-.0386	-.0498	-.0414	-.0390
110.000	-.0654	-.0635	-.0625	-.0615	-.0615	-.0577	-.0609	-.0627	-.0637	-.0664	-.0674	-.0701	-.0488	-.0864	-.0582
120.000						-.0557								-.0701	
130.000						-.0488								-.0637	
140.000						-.0535								-.0535	
150.000						-.0581								-.0479	
160.000						-.0544								-.0498	
170.000						-.0479								-.0572	
180.000	-.0412	-.0582	-.0582	-.0582	-.0431	-.0442	-.0442	-.0470	-.0488	-.0535	-.0516	-.0600	-.0488	-.0563	-.0544

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0535		
70.000							-.0089	-.0254	-.0426
80.000							.0028	-.0517	-.0471
90.000	-.0508	-.0635	-.0480	-.0462	-.0390	.0000	-.0181	-.0417	-.0580
100.000	-.0508	-.0462	-.0381	-.0362	-.0072	.0019			
110.000	-.0535	-.0508	-.0462	-.0054	.0173	-.0099			
120.000						-.0045			
130.000						.1382			
140.000						.2939			
150.000						.2675			
160.000						.1681			
170.000						.1365			
180.000	-.0508	-.0489	-.0453	.0100	.1356	.2455			

MACH (1) = 2.500 ALPHA (5) = 1.990 RN/L = 2.4984 BETA = 0.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2090	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI															
60.000	.1316	.0801	.0989												
70.000	.1175	.0919	.0801												
80.000	.1184	.0927	.0715												
90.000			.0780	.0178	-.0378	-.0674	-.0544	-.0526	-.0646	-.0794	-.0878	-.0953	-.0980	-.0970	-.0980
100.000						-.0822	-.0794	-.0883	-.0991	-.0711	-.0890	-.0943	-.1000	-.1009	-.0980
110.000						-.1137	-.1211	-.1304	-.1408	-.1313	-.0730	-.0744	-.0833	-.0872	-.0872
120.000						-.0818								-.0774	
130.000						-.0850								-.0892	
140.000						-.1109								-.0833	
150.000						-.1082								-.0878	

IA39 ORBITER ASCENT CONFIGURATION (R03001)

MACH (1) = 2.900 ALPHA (9) = 1.990

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1660	.2050	.2420	.2840	.2820	.3010	.3190	.3580	.3570	.3750	.3940	.4090	.4310
PHI															
180.000						-.1045								-.0577	
170.000						-.1045								-.0597	
160.000						-.0960	-.0878	-.0794	-.0767	-.0750	-.0702	-.0676	-.0646	-.0627	-.0627

X/L	.4300	.4680	.4880	.5090	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0970	-.0941	-.0921	-.0882	-.0852	-.0843	-.0809	-.0790	-.0735	-.0680	-.0697	-.0525	-.0765	-.0525	-.0496
100.000	-.0941	-.0882	-.0852	-.0825	-.0815	-.0793	-.0772	-.0765	-.0754	-.0717	-.0689	-.0652	-.0690	-.0532	-.0505
110.000	-.0825	-.0764	-.0744	-.0725	-.0735	-.0715	-.0735	-.0754	-.0754	-.0781	-.0680	-.0781	-.0737	-.0735	-.0687
120.000						-.0886								-.0790	
130.000						-.0597								-.0754	
140.000						-.0541								-.0861	
150.000						-.0634								-.0606	
160.000						-.0689								-.0606	
170.000						-.0661								-.0624	
180.000	-.0887	-.0887	-.0877	-.0877	-.0827	-.0815	-.0634	-.0861	-.0861	-.0680	-.0871	-.0765	-.0690	-.0680	-.0660

X/L	.7290	.7470	.7870	.7890	.8090	.8290	.8620	.9000	.9400
PHI									
60.000							-.0477		
70.000							-.0549	-.0577	-.0523
80.000							-.0231	-.0432	-.0569
90.000	-.0498	-.0587	-.0814	-.0598	-.0498	-.0139	-.0295	-.0514	-.0842
100.000	-.0425	-.0514	-.0587	-.0498	-.0178	-.0005			
110.000	-.0880	-.0814	-.0686	-.0139	.0043	-.0049			
120.000						.0071			
130.000						.1571			
140.000						.2558			
150.000						.1994			
160.000						.1248			
170.000						.1055			
180.000	-.0587	-.0569	-.0833	.0911	.1085	.1817			

IA35 ORBITER ASCENT CONFIGURATION (RQ50001)

MACH (1) = 2.500 ALPHA (6) = 4.010 RN/L = 2.4984 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1840	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1182	.0582	.0820												
70.000	.1173	.0599	.0288												
80.000	.1173	.0794	.0414												
90.000			.0520	-.0044	-.0951	-.0717	-.0579	-.0653	-.0791	-.0911	-.0986	-.1012	-.1039	-.1058	-.1078
100.000						-.0848	-.0810	-.0671	-.0899	-.0846	-.0957	-.1031	-.1078	-.1097	-.1088
110.000						-.1179	-.1252	-.1317	-.1335	-.0810	-.0857	-.0951	-.1010	-.1039	-.1019
120.000						-.0754								-.0815	
130.000						-.0957								-.0912	
140.000						-.1206								-.0951	
150.000						-.1142								-.0834	
160.000						-.1123								-.0737	
170.000						-.1123								-.0747	
180.000						-.1077	-.0994	-.0939	-.0929	-.0911	-.0874	-.0864	-.0825	-.0805	-.0776

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.1078	-.1088	-.1058	-.1019	-.0980	-.0941	-.0911	-.0883	-.0846	-.0780	-.0706	-.0625	-.0836	-.0339	-.0393
100.000	-.1058	-.1010	-.0980	-.0961	-.0941	-.0912	-.0892	-.0873	-.0845	-.0818	-.0706	-.0725	-.0790	-.0595	-.0557
110.000	-.0971	-.0912	-.0864	-.0854	-.0864	-.0825	-.0846	-.0873	-.0864	-.0864	-.0743	-.0836	-.0780	-.0780	-.0730
120.000						-.0786								-.0911	
130.000						-.0725								-.0855	
140.000						-.0880								-.0771	
150.000						-.0706								-.0725	
160.000						-.0790								-.0725	
170.000						-.0806								-.0753	
180.000	-.0756	-.0747	-.0747	-.0747	-.0786	-.0790	-.0818	-.0818	-.0836	-.0808	-.0799	-.0818	-.0780	-.0790	-.0748

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
80.000							-.0595		
70.000							-.0530	-.0475	-.0593
80.000							-.0286	-.0484	-.0821
90.000	-.0805	-.0712	-.0721	-.0705	-.0584	-.0230	-.0510	-.0521	-.0868
100.000	-.0521	-.0557	-.0539	-.0484	.0211	-.0120			
110.000	-.0888	-.0890	-.0539	-.0175	.0043	-.0257			
120.000						.0143			
130.000						.1354			
140.000						.2145			
150.000						.1609			
160.000						.0906			
170.000						.0835			
180.000	-.0875	-.0875	-.0539	.0316	.0748	.1371			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063) (R05001)

IA35 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.500 ALPHA (7) = 6.020 RN/L = 2.4984 BETA = 0.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0070	.1250	.1640	.2030	.2420	.2840	.2620	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0021	.0325	.0538												
70.000	.0918	.0516	.0096												
80.000	.1042	.0538	.0187												
90.000			.0261	-.0068	-.0511	-.0368	-.0858	-.0767	-.0879	-.0971	-.1026	-.1063	-.1123	-.1152	-.1182
100.000						-.0796	-.0576	-.0849	-.0805	-.0934	-.1017	-.1092	-.1163	-.1192	-.1192
110.000						-.1182	-.1201	-.1274	-.0833	-.0861	-.0989	-.1104	-.1153	-.1163	-.1142
120.000						-.0870								-.0877	
130.000						-.1072								-.0907	
140.000						-.1293								-.1025	
150.000						-.1247								-.0976	
160.000						-.1219								-.0907	
170.000						-.1219								-.0926	
180.000						-.1192	-.1127	-.1100	-.1063	-.1045	-.1045	-.1074	-.1095	-.1023	-.0985

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6920	.7100
PHI															
90.000	-.1202	-.1212	-.1192	-.1173	-.1133	-.1113	-.1080	-.1022	-.0986	-.0882	-.0751	-.0648	-.0919	-.0611	-.0884
100.000	-.1182	-.1155	-.1123	-.1094	-.1084	-.1064	-.1041	-.1022	-.0976	-.0948	-.0751	-.0770	-.0854	-.0620	-.0809
110.000	-.1113	-.1054	-.1025	-.0995	-.0995	-.0985	-.0976	-.0994	-.0985	-.0894	-.0788	-.0929	-.0826	-.0798	-.0882
120.000						-.0926								-.1004	
130.000						-.0816								-.0938	
140.000						-.0751								-.0882	
150.000						-.0751								-.0826	
160.000						-.0854								-.0855	
170.000						-.0919								-.0835	
180.000	-.0898	-.0938	-.0858	-.0946	-.0988	-.0948	-.0957	-.0948	-.0929	-.0919	-.0891	-.0919	-.0826	-.0863	-.0811

X/L	.7250	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0818		
70.000							-.0627	-.0554	-.0864
80.000							-.0426	-.0517	-.0710
90.000	-.0882	-.0785	-.0782	-.0774	-.0882	-.0334	-.0553	-.0472	-.0774
100.000	-.0845	-.0882	-.0882	-.0572	-.0288	-.0224			
110.000	-.0848	-.0582	-.0701	-.0233	.0087	-.0206			
120.000						.0335			
130.000						.1573			
140.000						.1994			
150.000						.1178			
160.000						.0758			
170.000						.0895			
180.000	-.0785	-.0747	-.0800	.0106	.0484	.1090			

IA35 ORBITER ASCENT CONFIGURATION (R89001)

MACH (2) = 2.950 ALPHA (1) = -6.000 RN/L = 2.5139 BETA = 6.0271

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0070	.1290	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.1217	.1926	.1187												
70.000	.1949	.1928	.0976												
80.000	.2290	.1167	.1068												
90.000			.0826	.0965	.0224	-.0087	-.0167	-.0248	-.0338	-.0408	-.0448	-.0478	-.0505	-.0492	-.0428
100.000						-.0899	-.0950	-.0909	-.0759	-.0629	-.0478	-.0398	-.0428	-.0450	-.0439
110.000						-.0940	-.0909	-.0950	-.0990	-.0960	-.0940	-.0965	-.0758	-.0694	-.0567
120.000						.0073								-.0662	
130.000						-.0097								-.0428	
140.000						-.0278								-.0173	
150.000						-.0197								.0019	
160.000						-.0137								.0157	
170.000						-.0117								.0210	
180.000						-.0067	.0013	.0105	.0184	.0234	.0254	.0221	.0221	.0231	.0242

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0399	-.0215	-.0141	-.0130	-.0077	-.0056	.0091	.0102	.0102	.0144	.0250	.0239	.0239	.0334	.0242
100.000	-.0428	-.0398	-.0290	-.0215	-.0215	-.0215	.0091	-.0099	-.0099	-.0067	.0060	.0176	.0239	.0186	-.0025
110.000	-.0513	-.0462	-.0450	-.0975	-.0333	.4004	-.0162	-.0162	-.0120	-.0099	-.0057	-.0014	.0176	.0049	.0797
120.000						.7822								-.0131	
130.000						-.0352								-.0226	
140.000						-.0183								-.0205	
150.000						.0049								-.0152	
160.000						.0186								.0028	
170.000						.0313								.0134	
180.000	.0274	.0327	.0970	.0949	.0285	.0408	.0398	.0377	.0355	-.0068	.0144	.0229	.0208	.0218	.0119

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							.0129		
70.000							.0467	.0339	.0232
80.000							.0877	.0408	.0129
90.000	.0822	.0170	.0129	.0109	.0170	.0821	.0508	.0068	-.0137
100.000	.0027	-.0014	-.0024	.0058	.0344	.0631			
110.000	.0078	.0129	.0181	.0539	.0784	.0549			
120.000						.0344			
130.000						.2376			
140.000						.3901			
150.000						.3782			
160.000						.2535			
170.000						.1931			
180.000	.0180	.0130	.0109	.0078	.1535	.4574			

IA35 ORBITER ASCENT CONFIGURATION (R05001)

MACH (2) = 2.950 ALPHA (2) = -3.990 RN/L = 2.5139 BETA = 6.0271

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
80.000	.1252	.1325	.0970												
70.000	.1394	.1315	.1045												
80.000	.1974	.1315	.1022												
90.000			.0815	.0469	.0051	-.0263	-.0346	-.0419	-.0492	-.0545	-.0586	-.0586	-.0572	-.0551	-.0398
100.000						-.0869	-.0931	-.0795	-.0649	-.0566	-.0534	-.0545	-.0572	-.0583	-.0540
110.000						-.0963	-.0942	-.1004	-.1057	-.1067	-.1015	-.0922	-.0812	-.0747	-.0649
120.000						-.0865								-.0736	
130.000						-.0263								-.0562	
140.000						-.0472								-.0332	
150.000						-.0388								-.0169	
160.000						-.0336								-.0038	
170.000						-.0325								.0017	
180.000						-.0273	-.0210	-.0127	-.0085	-.0022	.0009	.0006	.0006	.0028	.0060

X/L	.4300	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0322	-.0278	-.0256	-.0245	-.0212	-.0191	-.0153	-.0163	-.0153	-.0142	-.0131	-.0023	-.0088	.0074	.0055
100.000	-.0442	-.0300	-.0256	-.0212	-.0191	-.0191	-.0174	-.0174	-.0185	-.0153	-.0131	-.0099	-.0088	-.0088	-.0153
110.000	-.0585	-.0518	-.0387	-.0322	-.0322	.1448	-.0163	-.0260	-.0239	-.0217	-.0185	-.0196	-.0088	-.0185	-.0152
120.000						.3402								-.0239	
130.000						-.0476								-.0358	
140.000						-.0347								-.0347	
150.000						-.0163								-.0282	
160.000						-.0025								-.0228	
170.000						.0074								-.0153	
180.000	.0104	.0137	.0169	.0158	.0126	.0150	.0117	.0096	.0085	-.0207	.0009	-.0077	-.0077	-.0077	-.0111

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0070		
70.000							.0232	.0222	-.0038
80.000							.0534	.0097	-.0153
90.000	.0088	-.0038	-.0070	-.0080	-.0070	.0305	.0180	-.0080	-.0247
100.000	-.0099	-.0132	-.0091	-.0070	.0191	.0368			
110.000	-.0111	-.0059	-.0018	.0284	.0903	.0274			
120.000						.0252			
130.000						.2112			
140.000						.3540			
150.000						.3402			
160.000						.2122			
170.000						.1709			
180.000	-.0070	-.0101	-.0143	-.0143	.1304	.3677			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063)

IA35 ORBITER ASCENT CONFIGURATION (R05001)

MACH (2) = 2.950 ALPHA (3) = -2.010 RN/L = 2.913E BETA = 0.0271

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0970	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.1302	.1109	.1109												
70.000	.1237	.1109	.0872												
80.000	.1696	.1109	.0937												
90.000			.0829	.0907	-.0159	-.0449	-.0503	-.0557	-.0621	-.0684	-.0685	-.0685	-.0694	-.0539	-.0429
100.000						-.0825	-.0847	-.0761	-.0864	-.0864	-.0685	-.0707	-.0672	-.0661	-.0539
110.000						-.0965	-.0986	-.1051	-.1126	-.1147	-.1104	-.0969	-.0870	-.0815	-.0716
120.000						-.0245								-.0771	
130.000						-.0428								-.0672	
140.000						-.0684								-.0473	
150.000						-.0800								-.0330	
160.000						-.0548								-.0209	
170.000						-.0546								-.0164	
180.000						-.0505	-.0449	-.0552	-.0520	-.0277	-.0234	-.0175	-.0164	-.0142	-.0120

X/L	.4500	.4680	.4860	.5050	.5240	.5480	.5610	.5800	.5960	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0429	-.0418	-.0398	-.0369	-.0365	-.0365	-.0287	-.0298	-.0298	-.0298	-.0264	-.0264	-.0264	-.0109	-.0170
100.000	-.0429	-.0374	-.0330	-.0297	-.0298	-.0275	-.0167	-.0198	-.0220	-.0264	-.0264	-.0264	-.0264	-.0109	-.0298
110.000	-.0816	-.0451	-.0374	-.0341	-.0341	.0387	-.0209	-.0253	-.0231	-.0264	-.0264	-.0264	-.0264	-.0276	-.0327
120.000						.1427								-.0264	
130.000						-.0442								-.0298	
140.000						-.0367								-.0342	
150.000						-.0242								-.0309	
160.000						-.0153								-.0298	
170.000						-.0076								-.0253	
180.000	-.0088	-.0085	-.0094	-.0054	-.0087	-.0009	-.0031	-.0053	-.0087	-.0264	-.0264	-.0253	-.0253	-.0198	-.0275

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0243		
70.000							.0030	-.0025	-.0254
80.000							.0230	-.0107	-.0317
90.000	-.0107	-.0212	-.0284	-.0253	-.0212	.0093	-.0002	-.0191	-.0317
100.000	-.0191	-.0212	-.0191	-.0159	.0031	.0158			
110.000	-.0265	-.0244	-.0180	.0104	.0282	.0062			
120.000						.0135			
130.000						.1931			
140.000						.3274			
150.000						.3049			
160.000						.1754			
170.000						.1499			
180.000	-.0843	-.0254	-.0308	-.0254	.1208	.2852			

IA35 ORBITER ASCENT CONFIGURATION (RQ5001)

MACH (2) = 2.950 ALPHA (4) = .000 RN/L = 2.5139 BETA = 6.0271

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1244	.1042	.1032												
70.000	.1074	.1032	.0671												
80.000	.1417	.1032	.0798												
90.000			.0788	.0279	-.0263	-.0506	-.0549	-.0581	-.0644	-.0687	-.0676	-.0581	-.0484	-.0484	-.0496
100.000						-.0740	-.0772	-.0729	-.0697	-.0708	-.0729	-.0729	-.0674	-.0618	-.0484
110.000						-.0931	-.0952	-.1016	-.1090	-.1132	-.1111	-.1018	-.0896	-.0863	-.0707
120.000						-.0316								-.0618	
130.000						-.0528								-.0751	
140.000						-.0750								-.0585	
150.000						-.0708								-.0462	
160.000						-.0666								-.0351	
170.000						-.0655								-.0318	
180.000						-.0613	-.0581	-.0506	-.0464	-.0432	-.0400	-.0351	-.0319	-.0306	-.0284

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0507	-.0518	-.0518	-.0507	-.0484	-.0496	-.0512	-.0512	-.0535	-.0535	-.0512	-.0512	-.0512	-.0501	-.0340
100.000	-.0473	-.0462	-.0429	-.0418	-.0418	-.0418	-.0399	-.0410	-.0410	-.0410	-.0512	-.0512	-.0512	-.0501	-.0445
110.000	-.0340	-.0429	-.0418	-.0384	-.0384	-.0084	-.0410	-.0388	-.0376	-.0388	-.0512	-.0512	-.0512	-.0512	-.0477
120.000						.0428								-.0501	
130.000						-.0501								-.0501	
140.000						-.0523								-.0501	
150.000						-.0444								-.0501	
160.000						-.0376								-.0512	
170.000						-.0309								-.0501	
180.000	-.0282	-.0282	-.0251	-.0251	-.0284	-.0275	-.0275	-.0320	-.0331	-.0388	-.0512	-.0512	-.0512	-.0501	-.0456

X/L	.7290	.7470	.7870	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0424		
70.000							-.0225	-.0246	-.0403
80.000							-.0004	-.0277	-.0456
90.000	-.0277	-.0372	-.0414	-.0403	-.0361	-.0078	-.0151	-.0330	-.0445
100.000	-.0351	-.0340	-.0309	-.0277	-.0099	-.0015			
110.000	-.0458	-.0414	-.0340	-.0078	.0080	-.0141			
120.000						.0048			
130.000						.1771			
140.000						.2914			
150.000						.2530			
160.000						.1358			
170.000						.1234			
180.000	-.0424	-.0403	-.0408	-.0295	.0090	.2106			

IA39 ORBITER ASCENT CONFIGURATION (R05001)

MACH (2) = 2.950 ALPHA (5) = 2.010 RN/L = 2.5139 BETA = 0.0271

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1290	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1102	.0880	.0869												
70.000	.0942	.0878	.0570												
80.000	.1185	.0889	.0898												
90.000			.0708	.0145	-.0302	-.0557	-.0810	-.0853	-.0895	-.0895	-.0832	-.0568	-.0567	-.0800	-.0825
100.000						-.0832	-.0895	-.0717	-.0717	-.0759	-.0780	-.0738	-.0825	-.0800	-.0800
110.000						-.0897	-.0919	-.1004	-.1057	-.1110	-.1057	-.0880	-.0813	-.0788	-.0800
120.000						-.0408								-.0869	
130.000						-.0832								-.0824	
140.000						-.0885								-.0701	
150.000						-.0834								-.0800	
160.000						-.0802								-.0488	
170.000						-.0802								-.0466	
180.000						-.0748	-.0736	-.0842	-.0821	-.0800	-.0868	-.0522	-.0488	-.0477	-.0477

X/L	.4500	.4680	.4880	.5080	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
80.000	-.0836	-.0836	-.0836	-.0836	-.0834	-.0845	-.0830	-.0841	-.0853	-.0853	-.0830	-.0807	-.0596	-.0573	-.0489
100.000	-.0825	-.0825	-.0812	-.0800	-.0800	-.0589	-.0550	-.0562	-.0562	-.0562	-.0618	-.0807	-.0807	-.0573	-.0541
110.000	-.0544	-.0488	-.0477	-.0466	-.0488	-.0376	-.0448	-.0448	-.0459	-.0482	-.0596	-.0807	-.0596	-.0584	-.0625
120.000						-.0097								-.0562	
130.000						-.0482								-.0573	
140.000						-.0539								-.0573	
150.000						-.0539								-.0573	
160.000						-.0493								-.0562	
170.000						-.0471								-.0562	
180.000	-.0488	-.0455	-.0444	-.0455	-.0477	-.0448	-.0471	-.0493	-.0505	-.0471	-.0607	-.0807	-.0596	-.0573	-.0804

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0583		
70.000							-.0457	-.0428	-.0510
80.000							-.0269	-.0405	-.0541
90.000	-.0428	-.0510	-.0552	-.0552	-.0510	-.0257	-.0258	-.0457	-.0541
100.000	-.0438	-.0438	-.0415	-.0384	-.0248	-.0132			
110.000	-.0372	-.0341	-.0510	-.0227	-.0048	-.0321			
120.000						.0004			
130.000						.1609			
140.000						.2563			
150.000						.1855			
160.000						.1052			
170.000						.1010			
180.000	-.0372	-.0383	-.0393	-.0153	.0789	.1999			

IA35 ORBITER ASCENT CONFIGURATION (RQ5001)

MACH (2) = 2.990 ALPHA (6) = 4.020 RN/L = 2.5139 BETA = 6.0271

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.0934	.0868	.0890												
70.000	.0848	.0890	.0487												
80.000	.0997	.0890	.0362												
90.000			.0615	.0098	-.0370	-.0561	-.0614	-.0656	-.0699	-.0699	-.0646	-.0656	-.0686	-.0708	-.0752
100.000						-.0550	-.0603	-.0656	-.0720	-.0794	-.0794	-.0741	-.0686	-.0697	-.0741
110.000						-.0783	-.0847	-.0921	-.0963	-.0985	-.0900	-.0797	-.0752	-.0708	-.0664
120.000						-.0487								-.0675	
130.000						-.0699								-.0630	
140.000						-.0942								-.0752	
150.000						-.0910								-.0697	
160.000						-.0689								-.0597	
170.000						-.0689								-.0586	
180.000						-.0847	-.0847	-.0751	-.0741	-.0720	-.0699	-.0641	-.0641	-.0630	-.0597

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0752	-.0752	-.0752	-.0752	-.0741	-.0741	-.0741	-.0752	-.0752	-.0752	-.0718	-.0695	-.0683	-.0556	-.0512
100.000	-.0752	-.0752	-.0752	-.0719	-.0697	-.0686	-.0683	-.0683	-.0695	-.0695	-.0706	-.0683	-.0695	-.0648	-.0568
110.000	-.0875	-.0875	-.0864	-.0641	-.0630	-.0541	-.0602	-.0602	-.0614	-.0614	-.0695	-.0683	-.0672	-.0660	-.0656
120.000						-.0575								-.0657	
130.000						-.0510								-.0579	
140.000						-.0556								-.0545	
150.000						-.0614								-.0556	
160.000						-.0625								-.0614	
170.000						-.0625								-.0672	
180.000	-.0597	-.0597	-.0608	-.0608	-.0641	-.0648	-.0648	-.0672	-.0672	-.0614	-.0695	-.0683	-.0683	-.0718	-.0645

X/L	.7290	.7470	.7670	.7850	.8090	.8290	.8620	.9000	.9400
PHI									
60.000							-.0545		
70.000							-.0490	-.0457	-.0501
80.000							-.0502	-.0401	-.0501
90.000	-.0479	-.0545	-.0568	-.0568	-.0912	-.0291	-.0280	-.0401	-.0490
100.000	-.0457	-.0468	-.0446	-.0424	-.0280	-.0169			
110.000	-.0812	-.0579	-.0534	-.0502	-.0105	-.0280			
120.000						-.0191			
130.000						.1554			
140.000						.2232			
150.000						.1525			
160.000						.0916			
170.000						.0672			
180.000	-.0812	-.0801	-.0545	.0008	.0650	.1304			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063)

IA35 ORBITER ASCENT CONFIGURATION (R03001)

MACH (2) = 2.950 ALPHA (7) = 6.010 RN/L = 2.5139 BETA = 6.0271

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2050	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.0946	.0485	.0493												
70.000	.0951	.0485	.0225												
80.000	.0882	.0485	.0370												
90.000			.0527	-.0080	-.0584	-.0720	-.0709	-.0720	-.0678	-.0648	-.0687	-.0699	-.0759	-.0781	-.0815
100.000						-.0699	-.0709	-.0741	-.0772	-.0772	-.0720	-.0720	-.0781	-.0804	-.0827
110.000						-.0666	-.0919	-.0961	-.1015	-.0982	-.0687	-.0781	-.0759	-.0770	-.0815
120.000						-.0500								-.0940	
130.000						-.0699								-.0917	
140.000						-.0971								-.0828	
150.000						-.0940								-.0781	
160.000						-.0919								-.0714	
170.000						-.0919								-.0736	
180.000						-.0687	-.0698	-.0804	-.0804	-.0793	-.0772	-.0804	-.0804	-.0804	-.0793

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0838	-.0849	-.0881	-.0885	-.0872	-.0872	-.0853	-.0853	-.0864	-.0853	-.0811	-.0759	-.0790	-.0832	-.0857
100.000	-.0838	-.0849	-.0849	-.0838	-.0827	-.0827	-.0790	-.0801	-.0790	-.0801	-.0811	-.0790	-.0790	-.0758	-.0878
110.000	-.0815	-.0804	-.0781	-.0759	-.0748	-.0702	-.0706	-.0706	-.0717	-.0717	-.0748	-.0790	-.0790	-.0790	-.0804
120.000						-.0578								-.0780	
130.000						-.0559								-.0717	
140.000						-.0611								-.0696	
150.000						-.0717								-.0864	
160.000						-.0748								-.0885	
170.000						-.0759								-.0759	
180.000	-.0793	-.0781	-.0781	-.0781	-.0781	-.0769	-.0790	-.0811	-.0811	-.0717	-.0769	-.0790	-.0790	-.0822	-.0804

X/L	.7290	.7470	.7870	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
80.000							-.0878		
70.000							-.0836	-.0805	-.0836
80.000							-.0479	-.0531	-.0805
90.000	-.0720	-.0699	-.0720	-.0709	-.0878	-.0458	-.0574	-.0469	-.0584
100.000	-.0584	-.0805	-.0584	-.0584	-.0447	-.0259			
110.000	-.0584	-.0887	-.0815	-.0437	-.0198	-.0311			
120.000						.0013			
130.000						.1155			
140.000						.1791			
150.000						.1420			
160.000						.0527			
170.000						.0527			
180.000	-.0782	-.0782	-.0878	-.0849	.0202	.0842			

IA35 ORBITER ASCENT CONFIGURATION (RQ5001)

MACH (3) = 4.000 ALPHA (1) = -6.000 RN/L = 3.4976 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.1234	.1178	.1043												
70.000	.1758	.1176	.1015												
80.000	.2415	.1257	.0883												
90.000			.0835	.0519	.0144	-.0003	-.0022	-.0027	-.0012	-.0012	-.0027	-.0041	-.0105	-.0134	-.0169
100.000						-.0419	-.0481	-.0514	-.0547	-.0576	-.0571	-.0552	-.0546	-.0516	-.0437
110.000						-.0453	-.0533	-.0528	-.0535	-.0535	-.0528	-.0526	-.0491	-.0491	-.0467
120.000						.0518								-.0577	
130.000						.0352								-.0298	
140.000						.0120								-.0268	
150.000						.0120								-.0169	
160.000						.0120								-.0095	
170.000						.0120								-.0010	
180.000						.0201	.0111	.0254	.0130	-.0005	-.0074	-.0110	-.0055	-.0020	.0064

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0179	-.0179	-.0174	-.0168	-.0144	-.0129	-.0117	-.0110	-.0072	-.0027	.0005	.0018	.0176	.0063	.0049
100.000	-.0407	-.0402	-.0382	-.0377	-.0362	-.0338	-.0315	-.0276	-.0245	-.0215	-.0185	-.0170	.0124	-.0110	-.0138
110.000	-.0442	-.0432	-.0432	-.0407	-.0372	-.0293	-.0283	-.0253	-.0223	-.0208	-.0185	-.0163	.0026	-.0117	-.0138
120.000						-.0263								-.0140	
130.000						-.0215								-.0208	
140.000						-.0057								-.0012	
150.000						.0093								.0139	
160.000						.0178								.0296	
170.000						.0259								.0504	
180.000	.0114	.0193	.0803	.0257	.0257	.0312	.0342	.0364	.0387	.0402	.0417	.0191	.0214	.0349	.0349

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0047		
70.000							.0092	.0091	.0199
80.000							.0368	.0461	.0199
90.000	.0158	.0177	.0129	.0119	.0129	.0247	.0357	.0113	.0006
100.000	-.0083	-.0088	.0022	.0084	.0124	.0434			
110.000	-.0083	-.0091	.0054	.0279	.0493	.0456			
120.000						.0481			
130.000						.2323			
140.000						.3542			
150.000						.3016			
160.000						.2292			
170.000						.1660			
180.000	.0859	.0333	.0299	.0274	.0800	-.1011			

IA35 ORBITER ASCENT CONFIGURATION (R85001)

MACH (3) = 4.000 ALPHA (2) = -3.990 RN/L = 3.4976 BETA = 0.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0970	.1290	.1640	.2090	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.1089	.0983	.0834												
70.000	.1477	.0963	.0834												
80.000	.2051	.1026	.0829												
90.000			.0636	.0162	.0038	-.0097	-.0082	-.0106	-.0125	-.0169	-.0202	-.0226	-.0260	-.0275	-.0260
100.000						-.0476	-.0324	-.0562	-.0595	-.0619	-.0610	-.0552	-.0444	-.0375	-.0320
110.000						-.0524	-.0572	-.0572	-.0561	-.0581	-.0591	-.0579	-.0524	-.0499	-.0459
120.000						.0306								-.0435	
130.000						.0162								-.0275	
140.000						-.0055								-.0151	
150.000						-.0090								-.0091	
160.000						-.0090								-.0076	
170.000						-.0090								-.0066	
180.000						.0110	.0095	.0119	.0148	.0158	.0068	.0014	-.0086	-.0108	-.0126

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0080	-.0090	-.0095	-.0095	-.0095	-.0180	-.0184	-.0177	-.0146	-.0146	-.0131	-.0125	.0089	-.0085	-.0085
100.000	-.0330	-.0330	-.0350	-.0335	-.0325	-.0305	-.0321	-.0298	-.0298	-.0288	-.0260	-.0253	.0075	-.0207	-.0203
110.000	-.0435	-.0425	-.0410	-.0400	-.0395	-.0295	-.0375	-.0352	-.0329	-.0298	-.0288	-.0230	.0029	-.0199	-.0198
120.000						-.0285								-.0268	
130.000						-.0390								-.0537	
140.000						-.0280								-.0184	
150.000						-.0146								-.0062	
160.000						-.0047								.0006	
170.000						.0022								.0052	
180.000	-.0111	-.0088	-.0058	-.0001	.0054	.0075	.0090	.0113	.0113	.0128	.0121	.0075	.0098	.0063	.0102

X/L	.7290	.7470	.7670	.7830	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0171		
70.000							-.0080	.0118	.0011
80.000							.0332	.0275	.0070
90.000	.0097	.0008	-.0053	-.0016	-.0040	.0186	.0418	.0091	-.0042
100.000	-.0125	-.0128	-.0088	-.0092	.0113	.0299			
110.000	-.0133	-.0112	-.0097	.0155	.0537	.0284			
120.000						.0273			
130.000						.2116			
140.000						.3161			
150.000						.2401			
160.000						.1931			
170.000						.1295			
180.000	.0134	.0118	.0097	.0066	.0080	.3763			

IA35 ORBITER ASCENT CONFIGURATION (RB5001)

MACH (3) = 4.000 ALPHA (3) = -1.990 RN/L = 3.4976 BETA = 6.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0970	.1280	.1640	.2050	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.0928	.0828	.0875												
70.000	.1231	.0828	.0721												
80.000	.1708	.0870	.0717												
90.000			.0606	.0279	-.0009	-.0153	-.0172	-.0206	-.0249	-.0292	-.0328	-.0340	-.0360	-.0380	-.0350
100.000						-.0456	-.0460	-.0518	-.0552	-.0528	-.0451	-.0316	-.0280	-.0280	-.0315
110.000						-.0576	-.0566	-.0585	-.0600	-.0605	-.0609	-.0589	-.0554	-.0529	-.0469
120.000						.0150								-.0504	
130.000						.0015								-.0580	
140.000						-.0182								-.0245	
150.000						-.0167								-.0180	
160.000						-.0139								-.0101	
170.000						-.0139								-.0071	
180.000						-.0052	-.0062	-.0062	-.0028	-.0023	-.0025	-.0086	-.0091	-.0081	-.0081

X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0340	-.0385	-.0315	-.0300	-.0280	-.0255	-.0232	-.0201	-.0194	-.0186	-.0194	-.0186	-.0156	-.0171	-.0195
100.000	-.0390	-.0340	-.0335	-.0315	-.0300	-.0280	-.0270	-.0254	-.0239	-.0216	-.0232	-.0232	-.0156	-.0239	-.0249
110.000	-.0454	-.0440	-.0420	-.0390	-.0365	-.0280	-.0338	-.0330	-.0315	-.0308	-.0285	-.0277	-.0156	-.0282	-.0249
120.000						-.0280								-.0285	
130.000						-.0414								-.0368	
140.000						-.0338								-.0292	
150.000						-.0247								-.0201	
160.000						-.0178								-.0156	
170.000						-.0125								-.0140	
180.000	-.0088	-.0098	-.0028	-.0048	-.0091	-.0080	-.0064	-.0084	-.0057	-.0064	-.0064	-.0163	-.0118	-.0118	-.0109

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0286		
70.000							-.0200	-.0039	-.0131
80.000							.0149	.0068	-.0109
90.000	-.0109	-.0114	-.0114	-.0141	-.0131	.0031	.0192	-.0059	-.0184
100.000	-.0195	-.0195	-.0114	-.0104	.0014	.0149			
110.000	-.0822	-.0808	-.0141	.0041	.0202	.0127			
120.000						.0342			
130.000						.1926			
140.000						.2693			
150.000						.2194			
160.000						.1405			
170.000						.1068			
180.000	-.0095	-.0088	-.0098	-.0095	.0930	.2283			

IA35 ORBITER ASCENT CONFIGURATION (R03001)

MACH (3) = 4.000 ALPHA (4) = .000 RN/L = 3.4976 BETA = 6.0900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1840	.2090	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0825	.0719	.0714												
70.000	.1085	.0714	.0570												
80.000	.1405	.0719	.0536												
90.000			.0518	.0196	-.0108	-.0226	-.0226	-.0290	-.0274	-.0312	-.0341	-.0355	-.0378	-.0381	-.0381
100.000						-.0461	-.0447	-.0495	-.0461	-.0403	-.0299	-.0291	-.0296	-.0528	-.0381
110.000						-.0600	-.0586	-.0605	-.0623	-.0624	-.0624	-.0617	-.0577	-.0552	-.0501
120.000						.0014								-.0562	
130.000						-.0106								-.0481	
140.000						-.0298								-.0556	
150.000						-.0268								-.0506	
160.000						-.0269								-.0250	
170.000						-.0284								-.0255	
180.000						-.0192	-.0207	-.0207	-.0178	-.0178	-.0178	-.0200	-.0245	-.0245	-.0240

X/L	.4500	.4690	.4880	.5090	.5240	.5480	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0379	-.0371	-.0371	-.0381	-.0376	-.0366	-.0351	-.0343	-.0336	-.0336	-.0336	-.0328	-.0183	-.0305	-.0323
100.000	-.0331	-.0351	-.0348	-.0346	-.0326	-.0306	-.0290	-.0275	-.0275	-.0252	-.0252	-.0260	-.0191	-.0260	-.0281
110.000	-.0408	-.0408	-.0446	-.0406	-.0381	-.0298	-.0343	-.0328	-.0328	-.0313	-.0290	-.0275	-.0191	-.0275	-.0291
120.000						-.0291								-.0298	
130.000						-.0458								-.0359	
140.000						-.0374								-.0359	
150.000						-.0275								-.0305	
160.000						-.0199								-.0275	
170.000						-.0145								-.0252	
180.000	-.0220	-.0200	-.0175	-.0145	-.0135	-.0115	-.0115	-.0130	-.0145	-.0168	-.0176	-.0183	-.0191	-.0214	-.0200

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0383		
70.000							-.0307	-.0173	-.0232
80.000							-.0044	-.0105	-.0248
90.000	-.0227	-.0248	-.0252	-.0270	-.0227	-.0125	.0020	-.0173	-.0248
100.000	-.0221	-.0238	-.0252	-.0168	-.0093	.0015			
110.000	-.0227	-.0340	-.0238	-.0087	.0074	-.0017			
120.000						.0273			
130.000						.1625			
140.000						.2192			
150.000						.2241			
160.000						.0874			
170.000						.0724			
180.000	-.0211	-.0238	-.0252	-.0252	.0214	.1995			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1083) (R05001)

IA35 ORBITER ASCENT CONFIGURATION

MACH (3) = 4.000 ALPHA (5) = 2.000 RN/L = 3.4976 BETA = 6.0300

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1280	.1840	.2090	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI															
60.000	.0740	.0816	.0429												
70.000	.0922	.0806	.0482												
80.000	.1191	.0811	.0487												
90.000			.0420	.0075	-.0146	-.0246	-.0281	-.0280	-.0313	-.0537	-.0581	-.0510	-.0399	-.0409	-.0429
100.000						-.0356	-.0361	-.0337	-.0280	-.0280	-.0309	-.0356	-.0399	-.0409	-.0429
110.000						-.0572	-.0562	-.0502	-.0610	-.0634	-.0625	-.0615	-.0535	-.0568	-.0509
120.000						-.0086								-.0548	
130.000						-.0196								-.0535	
140.000						-.0385								-.0439	
150.000						-.0580								-.0394	
160.000						-.0368								-.0354	
170.000						-.0361								-.0304	
180.000						-.0299	-.0313	-.0328	-.0294	-.0294	-.0299	-.0309	-.0304	-.0309	-.0329

X/L	.4500	.4680	.4880	.5090	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0429	-.0434	-.0434	-.0439	-.0429	-.0409	-.0386	-.0378	-.0378	-.0386	-.0378	-.0378	-.0287	-.0363	-.0398
100.000	-.0429	-.0429	-.0429	-.0434	-.0429	-.0414	-.0386	-.0363	-.0333	-.0325	-.0325	-.0325	-.0287	-.0325	-.0360
110.000	-.0473	-.0494	-.0429	-.0404	-.0389	-.0354	-.0363	-.0363	-.0355	-.0325	-.0302	-.0287	-.0287	-.0302	-.0333
120.000						-.0324								-.0333	
130.000						-.0448								-.0363	
140.000						-.0416								-.0378	
150.000						-.0333								-.0371	
160.000						-.0287								-.0371	
170.000						-.0257								-.0355	
180.000	-.0514	-.0289	-.0284	-.0259	-.0264	-.0265	-.0280	-.0287	-.0287	-.0287	-.0302	-.0287	-.0287	-.0341	-.0360

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0484		
70.000							-.0425	-.0322	-.0387
80.000							-.0236	-.0265	-.0365
90.000	-.0548	-.0555	-.0349	-.0382	-.0376	-.0274	-.0102	-.0265	-.0365
100.000	-.0549	-.0555	-.0360	-.0242	-.0188	-.0091			
110.000	-.0549	-.0555	-.0290	-.0181	-.0010	-.0091			
120.000						.0119			
130.000						.1766			
140.000						.1948			
150.000						.1809			
160.000						.0619			
170.000						.0592			
180.000	-.0549	-.0349	-.0378	-.0328	.0022	.1305			

IA35 ORBITER ASCENT CONFIGURATION (RS0001)

MACH (S) = 4.000 ALPHA (S) = 4.000 RN/L = 3.4976 BETA = 0.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0070	.1280	.1840	.2090	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI															
60.000	.0879	.0368	.0995												
70.000	.0804	.0573	.0472												
80.000	.0882	.0373	.0306												
90.000			.0429	.0092	-.0105	-.0225	-.0258	-.0302	-.0355	-.0407	-.0441	-.0485	-.0483	-.0488	-.0493
100.000						-.0258	-.0254	-.0268	-.0307	-.0364	-.0407	-.0451	-.0488	-.0505	-.0523
110.000						-.0484	-.0480	-.0547	-.0995	-.0629	-.0609	-.0478	-.0404	-.0409	-.0488
120.000						-.0182								-.0538	
130.000						-.0302								-.0555	
140.000						-.0485								-.0498	
150.000						-.0470								-.0473	
160.000						-.0480								-.0429	
170.000						-.0458								-.0394	
180.000						-.0407	-.0417	-.0431	-.0407	-.0407	-.0407	-.0404	-.0399	-.0389	-.0384

X/L	.4500	.4680	.4680	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0488	-.0488	-.0493	-.0478	-.0454	-.0459	-.0438	-.0438	-.0445	-.0438	-.0445	-.0438	-.0592	-.0490	-.0483
100.000	-.0509	-.0513	-.0508	-.0495	-.0478	-.0454	-.0490	-.0415	-.0407	-.0400	-.0415	-.0415	-.0592	-.0407	-.0491
110.000	-.0488	-.0483	-.0478	-.0468	-.0459	-.0409	-.0430	-.0400	-.0362	-.0339	-.0339	-.0339	-.0592	-.0362	-.0393
120.000						-.0379								-.0377	
130.000						-.0453								-.0422	
140.000						-.0453								-.0422	
150.000						-.0415								-.0445	
160.000						-.0392								-.0453	
170.000						-.0400								-.0468	
180.000	-.0379	-.0379	-.0388	-.0399	-.0414	-.0407	-.0415	-.0415	-.0422	-.0438	-.0438	-.0389	-.0392	-.0483	-.0485

X/L	.7240	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0495		
70.000							-.0489	-.0439	-.0431
80.000							-.0345	-.0356	-.0420
90.000	-.0404	-.0483	-.0458	-.0458	-.0442	-.0350	-.0243	-.0361	-.0420
100.000	-.0388	-.0377	-.0358	-.0345	-.0270	-.0205			
110.000	-.0388	-.0377	-.0358	-.0248	-.0119	-.0200			
120.000						-.0025			
130.000						.1449			
140.000						.1857			
150.000						.1127			
160.000						.0251			
170.000						.0248			
180.000	-.0483	-.0458	-.0381	-.0281	-.0168	.0219			

IA33 ORBITER ASCENT CONFIGURATION (R05001)

MACH (3) = 4.000 ALPHA (7) = 6.010 RN/L = 3.4976 BETA = 6.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0848	.0494	.0489												
70.000	.0857	.0494	.0441												
80.000	.0778	.0494	.0498												
90.000			.0484	.0166	-.0195	-.0358	-.0416	-.0480	-.0479	-.0503	-.0506	-.0513	-.0557	-.0542	-.0547
100.000						-.0257	-.0296	-.0344	-.0392	-.0450	-.0493	-.0527	-.0562	-.0567	-.0572
110.000						-.0373	-.0411	-.0469	-.0479	-.0464	-.0455	-.0496	-.0542	-.0557	-.0582
120.000						-.0248								-.0572	
130.000						-.0373								-.0572	
140.000						-.0522								-.0547	
150.000						-.0527								-.0542	
160.000						-.0532								-.0511	
170.000						-.0527								-.0486	
180.000						-.0484	-.0498	-.0513	-.0484	-.0488	-.0503	-.0481	-.0486	-.0486	-.0471

X/L	.4900	.4680	.4980	.5090	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0547	-.0537	-.0516	-.0506	-.0501	-.0501	-.0504	-.0504	-.0504	-.0504	-.0496	-.0496	-.0458	-.0481	-.0494
100.000	-.0572	-.0567	-.0547	-.0516	-.0491	-.0476	-.0458	-.0450	-.0450	-.0458	-.0466	-.0473	-.0466	-.0473	-.0483
110.000	-.0577	-.0572	-.0552	-.0526	-.0501	-.0446	-.0435	-.0427	-.0412	-.0412	-.0412	-.0412	-.0458	-.0435	-.0451
120.000						-.0401								-.0427	
130.000						-.0504								-.0458	
140.000						-.0481								-.0473	
150.000						-.0481								-.0504	
160.000						-.0481								-.0530	
170.000						-.0504								-.0588	
180.000	-.0478	-.0481	-.0481	-.0492	-.0516	-.0527	-.05[illegible]4	-.0550	-.0565	-.0572	-.0580	-.0458	-.0458	-.0603	-.0564

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0485		
70.000							-.0451	-.0418	-.0397
80.000							-.0397	-.0391	-.0424
90.000	-.0435	-.0482	-.0505	-.0483	-.0478	-.0397	-.0327	-.0402	-.0424
100.000	-.0413	-.0424	-.0408	-.0397	-.0337	-.0294			
110.000	-.0413	-.0418	-.0413	-.0311	-.0208	-.0278			
120.000						-.0160			
130.000						.1185			
140.000						.1474			
150.000						.0957			
160.000						-.0160			
170.000						-.0118			
180.000	-.0537	-.0510	-.0478	-.0435	-.0364	-.0176			

IA33 ORBITER ASCENT CONFIGURATION (R85001)

MACH (4) = 4.900 ALPHA (1) = -6.000 RN/L = 3.5070 BETA = 6.0301

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0970	.1260	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.1289	.1143	.0909												
70.000	.1839	.1014	.0932												
80.000	.2508	.1313	.0804												
90.000			.0868	.0295	.0125	-.0021	-.0050	-.0074	-.0091	-.0091	-.0074	-.0068	-.0071	-.0083	-.0089
100.000						-.0243	-.0355	-.0413	-.0448	-.0471	-.0471	-.0434	-.0440	-.0428	-.0397
110.000						-.0343	-.0436	-.0431	-.0436	-.0436	-.0425	-.0409	-.0397	-.0391	-.0391
120.000						.0548								-.0373	
130.000						.0977								-.0283	
140.000						.0102								-.0271	
150.000						.0020								-.0210	
160.000						.0008								-.0150	
170.000						.0032								-.0095	
180.000						.0090	.0189	.0125	-.0021	-.0091	-.0144	-.0188	-.0132	-.0095	-.0005

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6750	.6880	.7100
PHI															
90.000	-.0089	-.0089	-.0085	-.0071	-.0071	-.0071	-.0121	-.0121	-.0121	-.0121	-.0093	-.0086	-.0029	-.0020	-.0083
100.000	-.0367	-.0349	-.0337	-.0331	-.0315	-.0295	-.0340	-.0305	-.0276	-.0250	-.0205	-.0186	-.0130	-.0121	-.0116
110.000	-.0379	-.0361	-.0343	-.0331	.0092	-.0295	-.0331	-.0305	-.0267	-.0240	-.0212	-.0176	-.0148	-.0139	-.0123
120.000						.0448								-.0212	
130.000						-.0249								-.0212	
140.000						.1643								-.0029	
150.000						.0053								.0099	
160.000						.0135								.0181	
170.000						.0181								.0245	
180.000	.0098	.0110	.0152	.0183	.0219	.0208	.0228	.0254	.0290	.0309	.0336	.0336	.0318	.0309	.0314

X/L	.7290	.7470	.7870	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
90.000							-.0143		
70.000							-.0116	.0049	.0082
80.000							.0195	.0400	.0135
90.000	.0029	-.0010	-.0010	.0016	.0043	.0122	.0548	.0115	-.0024
100.000	-.0097	-.0090	-.0017	.0005	.0102	.0367			
110.000	-.0070	-.0057	-.0004	.0142	.0360	.0387			
120.000						.0532			
130.000						.2295			
140.000						.3407			
150.000						.3138			
160.000						.2015			
170.000						.1398			
180.000	.0547	.0507	.0291	.0288	.0804	.4115			

DATE 24 JAN 94 TABULATED SOURCE PRESSURE DATA FOR IA33/OA84 (LARC UPWT 1083)

IA33 ORBITER ASCENT CONFIGURATION (R09001)

MACH (4) = 4.500 ALPHA (2) = -4.000 RN/L = 3.5070 BETA = 0.0900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.1084	.0939	.0724												
70.000	.1515	.0800	.0771												
80.000	.2080	.1058	.0883												
90.000			.0677	.0185	.0039	-.0096	-.0120	-.0125	-.0131	-.0131	-.0131	-.0125	-.0140	-.0152	-.0164
100.000						-.0313	-.0371	-.0424	-.0465	-.0489	-.0489	-.0471	-.0462	-.0450	-.0401
110.000						-.0407	-.0454	-.0454	-.0459	-.0454	-.0442	-.0432	-.0419	-.0407	-.0401
120.000						.0584								-.0401	
130.000						.0244								-.0292	
140.000						.0055								-.0194	
150.000						.0050								-.0162	
160.000						.0068								-.0176	
170.000						.0045								-.0182	
180.000						.0132	.0097	.0050	.0004	.0039	-.0049	-.0133	-.0188	-.0206	-.0206

X/L	.4500	.4680	.4880	.5030	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0158	-.0158	-.0133	-.0140	-.0140	-.0140	-.0139	-.0139	-.0130	-.0121	-.0112	-.0103	-.0094	-.0085	-.0163
100.000	-.0377	-.0368	-.0340	-.0316	-.0298	-.0279	-.0247	-.0229	-.0211	-.0193	-.0176	-.0148	-.0094	-.0103	-.0143
110.000	-.0369	-.0371	-.0359	-.0346	-.0325	-.0354	-.0319	-.0292	-.0274	-.0247	-.0224	-.0202	-.0166	-.0166	-.0176
120.000						- 0066								-.0202	
130.000						-.0328								-.0230	
140.000						.0481								-.0130	
150.000						-.0121								-.0013	
160.000						-.0049								.0041	
170.000						-.0004								.0076	
180.000	-.0182	-.0158	-.0109	-.0075	-.0042	.0014	.0041	.0068	.0085	.0105	.0112	.0112	.0112	.0094	.0066

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0182		
70.000							-.0163	-.0077	-.0064
80.000							.0001	.0204	.0055
90.000	-.0077	-.0110	-.0117	-.0104	-.0091	.0001	.0426	.0125	-.0045
100.000	-.0038	-.0071	-.0052	-.0012	.0080	.0269			
110.000	-.0117	-.0097	-.0058	.0099	.0282	.0269			
120.000						.0354			
130.000						.2147			
140.000						.3009			
150.000						.2049			
160.000						.1735			
170.000						.1283			
180.000	.0138	.0119	.0108	.0099	.0098	.3407			

IA35 ORBITER ASCENT CONFIGURATION (R05001)

MACH (4) = 4.500 ALPHA (3) = -1.970 RN/L = 3.9070 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0980	.0836	.0547												
70.000	.1232	.0825	.0808												
80.000	.1691	.0854	.0594												
90.000			.0571	.0145	-.0091	-.0182	-.0174	-.0174	-.0174	-.0180	-.0186	-.0197	-.0233	-.0298	-.0297
100.000						-.0345	-.0398	-.0428	-.0457	-.0493	-.0495	-.0457	-.0442	-.0411	-.0300
110.000						-.0457	-.0481	-.0487	-.0499	-.0493	-.0481	-.0485	-.0472	-.0448	-.0411
120.000						.0204								-.0472	
130.000						.0080								-.0356	
140.000						-.0109								-.0253	
150.000						-.0105								-.0178	
160.000						-.0079								-.0122	
170.000						-.0073								-.0096	
180.000						.0015	-.0014	-.0020	-.0020	-.0002	-.0008	-.0092	-.0104	-.0110	-.0153

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0257	-.0245	-.0238	-.0245	-.0245	-.0245	-.0209	-.0209	-.0200	-.0200	-.0200	-.0191	-.0182	-.0182	-.0305
100.000	-.0278	-.0264	-.0276	-.0276	-.0276	-.0257	-.0200	-.0182	-.0200	-.0200	-.0200	-.0200	-.0191	-.0191	-.0299
110.000	-.0405	-.0392	-.0386	-.0380	-.0370	-.0349	-.0317	-.0299	-.0308	-.0299	-.0290	-.0272	-.0263	-.0254	-.0312
120.000						-.0325								-.0236	
130.000						-.0398								-.0281	
140.000						-.0317								-.0254	
150.000						-.0263								-.0191	
160.000						-.0200								-.0137	
170.000						-.0182								-.0137	
180.000	-.0214	-.0239	-.0239	-.0227	-.0214	-.0155	-.0137	-.0137	-.0109	-.0109	-.0109	-.0118	-.0109	-.0118	-.0172

X/L	.7290	.7470	.7670	.7850	.8090	.8290	.8820	.9000	.9400
PHI									
60.000							-.0305		
70.000							-.0285	-.0212	-.0205
80.000							-.0139	-.0005	-.0185
90.000	-.0225	-.0222	-.0285	-.0285	-.0245	-.0145	.0161	-.0025	-.0185
100.000	-.0219	-.0285	-.0219	-.0252	-.0099	.0101			
110.000	-.0259	-.0239	-.0185	-.0045	.0108	.0075			
120.000						.0081			
130.000						.1855			
140.000						.2549			
150.000						.1855			
160.000						.1135			
170.000						.0902			
180.000	-.0119	-.0132	-.0145	-.0112	.0341	.1815			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063) (R89001)

IA35 ORBITER ASCENT CONFIGURATION

MACH (4) = 4.930 ALPHA (4) = -.010 RN/L = 3.5070 BETA = 0.0300

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0070	.1200	.1660	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.0848	.0722	.0499												
70.000	.1082	.0875	.0578												
80.000	.1390	.0746	.0532												
90.000			.0523	.0184	-.0124	-.0206	-.0200	-.0206	-.0212	-.0224	-.0247	-.0259	-.0297	-.0309	-.0322
100.000						-.0306	-.0347	-.0359	-.0365	-.0371	-.0324	-.0253	-.0256	-.0256	-.0261
110.000						-.0453	-.0455	-.0470	-.0482	-.0488	-.0478	-.0474	-.0456	-.0450	-.0407
120.000						.0000								-.0450	
130.000						-.0018								-.0407	
140.000						-.0000								-.0297	
150.000						-.0000								-.0255	
160.000						-.0177								-.0212	
170.000						-.0177								-.0200	
180.000						-.0108	-.0130	-.0141	-.0141	-.0124	-.0130	-.0157	-.0188	-.0206	-.0206

X/L	.4880	.4680	.4980	.5090	.5280	.5480	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0316	-.0318	-.0309	-.0308	-.0305	-.0297	-.0282	-.0282	-.0291	-.0273	-.0284	-.0255	-.0246	-.0237	-.0309
100.000	-.0279	-.0291	-.0297	-.0297	-.0279	-.0287	-.0246	-.0219	-.0228	-.0219	-.0219	-.0219	-.0210	-.0210	-.0270
110.000	-.0481	-.0369	-.0365	-.0376	-.0273	-.0346	-.0318	-.0309	-.0282	-.0282	-.0264	-.0255	-.0255	-.0255	-.0296
120.000						-.0297								-.0300	
130.000						-.0372								-.0345	
140.000						-.0336								-.0327	
150.000						-.0257								-.0273	
160.000						-.0174								-.0255	
170.000						-.0196								-.0264	
180.000	-.0800	-.0188	-.0175	-.0175	-.0157	-.0120	-.0129	-.0138	-.0165	-.0210	-.0237	-.0246	-.0255	-.0255	-.0270

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0336		
70.000							-.0325	-.0257	-.0257
80.000							-.0184	-.0091	-.0217
90.000	-.0234	-.0250	-.0250	-.0263	-.0257	-.0171	.0021	-.0118	-.0250
100.000	-.0204	-.0217	-.0197	-.0171	-.0105	.0034			
110.000	-.0257	-.0257	-.0210	-.0091	.0041	.0021			
120.000						.0153			
130.000						.1592			
140.000						.1699			
150.000						.1684			
160.000						.0615			
170.000						.0536			
180.000	-.0250	-.0257	-.0270	-.0134	.0074	.1044			

IA35 ORBITER ASCENT CONFIGURATION (RQ5001)

MACH (4) = 4.900 ALPHA (5) = 2.010 RN/L = 3.5070 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1280	.1840	.2090	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.0795	.0571	.0416												
70.000	.0909	.0535	.0478												
80.000	.1134	.0812	.0484												
90.000			.0422	.0068	-.0183	-.0286	-.0286	-.0288	-.0302	-.0290	-.0308	-.0328	-.0339	-.0351	-.0369
100.000						-.0286	-.0326	-.0314	-.0278	-.0234	-.0284	-.0290	-.0327	-.0345	-.0369
110.000						-.0480	-.0474	-.0498	-.0416	-.0327	-.0316	-.0492	-.0473	-.0473	-.0455
120.000						-.0047								-.0461	
130.000						-.0153								-.0461	
140.000						-.0320								-.0368	
150.000						-.0314								-.0351	
160.000						-.0302								-.0308	
170.000						-.0296								-.0278	
180.000						-.0243	-.0286	-.0290	-.0272	-.0286	-.0286	-.0272	-.0272	-.0272	-.0284

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0378	-.0378	-.0378	-.0378	-.0378	-.0369	-.0361	-.0352	-.0352	-.0352	-.0343	-.0343	-.0333	-.0324	-.0308
100.000	-.0378	-.0378	-.0378	-.0382	-.0378	-.0369	-.0352	-.0352	-.0343	-.0324	-.0324	-.0306	-.0306	-.0297	-.0315
110.000	-.0430	-.0418	-.0408	-.0388	-.0369	-.0369	-.0352	-.0343	-.0333	-.0333	-.0315	-.0306	-.0297	-.0297	-.0321
120.000						-.0363								-.0324	
130.000						-.0408								-.0361	
140.000						-.0397								-.0352	
150.000						-.0333								-.0352	
160.000						-.0297								-.0333	
170.000						-.0270								-.0324	
180.000	-.0290	-.0284	-.0278	-.0278	-.0284	-.0288	-.0297	-.0297	-.0306	-.0306	-.0306	-.0306	-.0324	-.0333	-.0333

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0427		
70.000							-.0401	-.0354	-.0369
80.000							-.0288	-.0255	-.0354
90.000	-.0309	-.0341	-.0349	-.0354	-.0354	-.0288	-.0109	-.0229	-.0335
100.000	-.0288	-.0275	-.0288	-.0288	-.0195	-.0056			
110.000	-.0282	-.0282	-.0255	-.0182	-.0050	-.0070			
120.000						-.0010			
130.000						.1441			
140.000						.1573			
150.000						.1268			
160.000						.0427			
170.000						.0414			
180.000	-.0348	-.0348	-.0348	-.0282	-.0083	.0058			

IA35 ORBITER ASCENT CONFIGURATION (R85001)

MACH (4) = 4.300 ALPHA (6) = 4.010 RN/L = 3.5070 BETA = 0.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1290	.1840	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0912	.0890	.0518												
70.000	.0812	.0839	.0455												
80.000	.0806	.0895	.0506												
90.000			.0439	.0130	-.0129	-.0225	-.0284	-.0294	-.0325	-.0347	-.0355	-.0384	-.0378	-.0384	-.0402
100.000						-.0225	-.0211	-.0211	-.0241	-.0282	-.0325	-.0353	-.0384	-.0396	-.0414
110.000						-.0368	-.0400	-.0435	-.0470	-.0494	-.0494	-.0439	-.0384	-.0380	-.0368
120.000						-.0117								-.0439	
130.000						-.0225								-.0451	
140.000						-.0355								-.0420	
150.000						-.0353								-.0402	
160.000						-.0358								-.0368	
170.000						-.0358								-.0329	
180.000						-.0358	-.0329	-.0341	-.0341	-.0329	-.0329	-.0329	-.0325	-.0325	-.0325

X/L	.4600	.4880	.4980	.5080	.5240	.5460	.5610	.5800	.5980	.6170	.6380	.6540	.6730	.6880	.7100
PHI															
90.000	-.0402	-.0400	-.0408	-.0408	-.0402	-.0380	-.0384	-.0384	-.0384	-.0384	-.0384	-.0355	-.0346	-.0355	-.0416
100.000	-.0414	-.0414	-.0414	-.0408	-.0408	-.0402	-.0373	-.0373	-.0355	-.0346	-.0337	-.0337	-.0346	-.0329	-.0384
110.000	-.0384	-.0396	-.0380	-.0384	-.0368	-.0378	-.0355	-.0346	-.0346	-.0329	-.0311	-.0302	-.0302	-.0329	-.0344
120.000						-.0368								-.0337	
130.000						-.0381								-.0384	
140.000						-.0384								-.0373	
150.000						-.0384								-.0382	
160.000						-.0346								-.0382	
170.000						-.0355								-.0400	
180.000	-.0823	-.0335	-.0368	-.0378	-.0378	-.0364	-.0384	-.0373	-.0382	-.0382	-.0400	-.0400	-.0409	-.0400	-.0377

X/L	.7250	.7470	.7870	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0423		
70.000							-.0397	-.0357	-.0357
80.000							-.0324	-.0251	-.0344
90.000	-.0881	-.0870	-.0877	-.0880	-.0897	-.0824	-.0806	-.0278	-.0351
100.000	-.0824	-.0351	-.0511	-.0305	-.0845	-.0147			
110.000	-.0518	-.0518	-.0896	-.0219	-.0107	-.0134			
120.000						-.0075			
130.000						.1102			
140.000						.1708			
150.000						.1707			
160.000						-.0075			
170.000						-.0101			
180.000	-.0877	-.0870	-.0937	-.0351	-.0305	-.0140			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1083) (R05001)

IA35 ORBITER ASCENT CONFIGURATION

MACH (4) = 4.500 ALPHA (7) = . 6.010 RN/L = 3.5070 BETA = 6.0900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3760	.3940	.4090	.4310
PHI															
60.000	.0682	.0455	.0309												
70.000	.0682	.0455	.0305												
80.000	.0790	.0514	.0444												
90.000			.0461	.0143	-.0169	-.0287	-.0334	-.0375	-.0399	-.0417	-.0428	-.0423	-.0444	-.0450	-.0450
100.000						-.0275	-.0269	-.0281	-.0322	-.0364	-.0387	-.0405	-.0438	-.0450	-.0456
110.000						-.0275	-.0340	-.0375	-.0395	-.0381	-.0364	-.0389	-.0425	-.0438	-.0456
120.000						-.0187								-.0468	
130.000						-.0287								-.0468	
140.000						-.0411								-.0456	
150.000						-.0428								-.0450	
160.000						-.0428								-.0438	
170.000						-.0425								-.0413	
180.000						-.0387	-.0405	-.0417	-.0417	-.0393	-.0393	-.0395	-.0401	-.0401	-.0419

X/L	.4500	.4680	.4880	.5090	.5240	.5460	.5610	.5800	.5980	.6170	.6560	.6540	.6750	.6880	.7100
PHI															
90.000	-.0450	-.0450	-.0450	-.0450	-.0432	-.0425	-.0408	-.0417	-.0417	-.0408	-.0417	-.0408	-.0408	-.0390	-.0393
100.000	-.0462	-.0462	-.0462	-.0456	-.0450	-.0425	-.0408	-.0390	-.0381	-.0372	-.0390	-.0390	-.0390	-.0390	-.0446
110.000	-.0462	-.0462	-.0462	-.0450	-.0432	-.0425	-.0399	-.0360	-.0363	-.0354	-.0354	-.0354	-.0354	-.0372	-.0413
120.000						-.0413								-.0372	
130.000						-.0417								-.0408	
140.000						-.0390								-.0408	
150.000						-.0426								-.0435	
160.000						-.0426								-.0471	
170.000						-.0435								-.0462	
180.000	-.0425	-.0425	-.0425	-.0432	-.0450	-.0462	-.0471	-.0480	-.0489	-.0489	-.0498	-.0480	-.0480	-.0471	-.0473

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0473		
70.000							-.0439	-.0408	-.0468
80.000							-.0393	-.0373	-.0413
90.000	-.0408	-.0448	-.0448	-.0455	-.0473	-.0413	-.0340	-.0368	-.0413
100.000	-.0393	-.0408	-.0393	-.0368	-.0380	-.0293			
110.000	-.0373	-.0388	-.0368	-.0408	-.0227	-.0247			
120.000						-.0260			
130.000						.0804			
140.000						.1050			
150.000						-.0040			
160.000						-.0368			
170.000						-.0320			
180.000	-.0468	-.0473	-.0459	-.0488	-.0439	-.0393			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1083) (R03002) (03 JAN 74)

IA35 ORBITER ASCENT CONFIGURATION

REFERENCE DATA

PARAMETRIC DATA

SREF = .0000 SQ.IN. XMRP = .0000 IN. BETA = 4.000 ELEVON = .000
LREF = .0000 IN. YMRP = .0000 IN.
BREF = .1000 IN. ZMRP = .0000 IN.
SCALE = .0150 SCALE

MACH (1) = 2.500 ALPHA (1) = -5.980 RN/L = 2.4989 BETA = 4.0900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2090	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.2098	.1948	.1789												
70.000	.1884	.1935	.1574												
80.000	.2357	.1995	.1574												
90.000			.1512	.1105	.0808	-.0800	-.0282	-.0228	-.0071	-.0155	-.0291	-.0400	-.0482	-.0472	-.0452
100.000						-.0509	-.0345	-.0291	-.0536	-.0155	-.0110	-.0248	-.0547	-.0404	-.0305
110.000						-.1071	-.1035	-.1116	-.1216	-.1216	-.1016	-.0883	-.0435	-.0347	-.0270
120.000						.0008								-.0481	
130.000						-.0282								-.0414	
140.000						-.0509								-.0184	
150.000						-.0427								.0058	
160.000						-.0355								.0219	
170.000						-.0536								.0315	
180.000						-.0529	-.0119	.0083	.0189	.0316	.0545	.0552	.0569	.0569	.0580

X/L	.4500	.4680	.4860	.5050	.5240	.5480	.5610	.5800	.5980	.6170	.6360	.6540	.6750	.6860	.7100
PHI															
90.000	-.0378	-.0289	-.0213	-.0155	-.0088	-.0089	-.0002	.0034	.0053	.0134	.0216	.0335	.0180	.0458	.0422
100.000	-.0337	-.0280	-.0213	-.0185	-.0125	-.0107	-.0084	-.0057	-.0058	.0016	.0207	.0153	.0234	.0525	.0578
110.000	-.0889	-.0891	-.0232	-.0193	-.0185	-.0404	-.0139	-.0129	-.0129	-.0111	-.0075	-.0038	.0234	.0034	.0131
120.000						-.0558								-.0184	
130.000						.0071								-.0139	
140.000						.0053								.0043	
150.000						.0034								.0143	
160.000						.0125								.0196	
170.000						.0218								.0171	
180.000	.0360	.0360	.0369	.0377	.0315	.0269	.0280	.0255	.0254	.0207	.0207	.0107	.0180	.0162	.0233

X/L	.7290	.7470	.7670	.7890	.8090	.8290	.8620	.9000	.9400
PHI									
60.000							.0396		
70.000							.0765	.0623	.0307
80.000							.0911	.0448	.0214
90.000	.0370	.0205	.0186	.0253	.0253	.0728	.0632	.0307	.0075
100.000	.0370	.0242	.0231	.0242	.0719	.0911			
110.000	.0140	.0225	.0205	.0737	.0999	.0737			
120.000						.0667			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQS002)

IA35 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.900 ALPHA (1) = -5.980

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
130.000						.2790			
140.000						.4162			
150.000						.4494			
160.000						.3253			
170.000						.2781			
180.000	.0307	.0307	.0253	.0298	.2842	.4667			

MACH (1) = 2.900 ALPHA (2) = -5.980 RN/L = 2.4989 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2120	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.2050	.1554	.1350												
70.000	.1731	.1554	.1297												
80.000	.2227	.1740	.1394												
90.000			.1394	.1005	-.0006	-.0288	-.0161	.0004	-.0133	-.0316	-.0455	-.0535	-.0599	-.0599	-.0560
100.000						-.0535	-.0462	-.0361	-.0097	-.0161	-.0307	-.0455	-.0550	-.0589	-.0570
110.000						-.1054	-.1045	-.1137	-.1228	-.1248	-.0963	-.0250	-.0260	-.0308	-.0347
120.000						-.0068								-.0453	
130.000						-.0369								-.0550	
140.000						-.0890								-.0566	
150.000						-.0817								-.0145	
160.000						-.0555								.0012	
170.000						-.0544								.0089	
180.000						-.0525	-.0552	-.0197	-.0060	.0049	.0131	.0119	.0109	.0128	.0109

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0521	-.0473	-.0405	-.0376	-.0318	-.0318	-.0300	-.0272	-.0236	-.0144	-.0016	.0094	.0002	.0185	.0103
100.000	-.0512	-.0444	-.0376	-.0327	-.0298	-.0269	-.0254	-.0283	-.0245	-.0226	-.0181	-.0126	.0021	.0066	.0076
110.000	-.0558	-.0547	-.0347	-.0318	-.0306	-.0327	-.0245	-.0245	-.0254	-.0272	-.0190	-.0254	.0012	-.0162	-.0107
120.000						-.0405								-.0327	
130.000						-.0043								-.0263	
140.000						.0002								-.0117	
150.000						-.0053								.0002	
160.000						-.0071								.0039	
170.000						-.0007								.0030	
180.000	.0117	.0089	.0128	.0109	.0070	.0048	.0048	.0021	.0012	.0012	.0021	-.0062	.0012	.0002	.0002

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									

DATE 24 JAN 94 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063) (R0900E)

IA35 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.500 ALPHA (2) = -5.900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8050	.8250	.8429	.9000	.9400
PHI							.0165		
80.000							.0541	.0277	.0021
70.000							.0805	.0195	-.0080
80.000							.0949	.0085	-.0144
90.000	.0080	-.0043	-.0071	-.0052	-.0007	.0535			
100.000	.0197	-.0026	.0096	.0098	.0420	.0587			
110.000	-.0043	-.0068	-.0135	.0484	.0781	.0438			
120.000						.0865			
130.000						.0482			
140.000						.3724			
150.000						.3556			
160.000						.2799			
170.000						.0405			
180.000	.0089	.0086	-.0071	.0121	.2244	.4085			

MACH (1) = 2.900 ALPHA (3) = -1.900 RN/L = 2.4989 BETA = 4.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0070	.1280	.1440	.2050	.2420	.2640	.2820	.3010	.3190	.3560	.3570	.3790	.3940	.4050	.4910
PHI															
60.000	.1928	.1909	.1130												
70.000	.1889	.1909	.1097												
80.000	.1928	.1878	.1191												
90.000			.1270	.0828	-.0017	-.0192	-.0017	-.0127	-.0295	-.0487	-.0368	-.0655	-.0886	-.0886	-.0886
100.000						-.0805	-.0541	-.0192	-.0127	-.0539	-.0495	-.0605	-.0886	-.0705	-.0705
110.000						-.1075	-.1284	-.1138	-.1139	-.1000	-.0256	-.0566	-.0483	-.0541	-.0589
120.000						-.0210								-.0483	
130.000						-.0513								-.0589	
140.000						-.0844								-.0541	
150.000						-.0788								-.0318	
160.000						-.0734								-.0172	
170.000						-.0724								-.0124	
180.000						-.0715	-.0388	-.0405	-.0885	-.0146	-.0100	-.0105	-.0114	-.0114	-.0124

X/L	.4500	.4680	.4880	.5050	.5240	.5480	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0887	-.0847	-.0809	-.0580	-.0590	-.0541	-.0531	-.0541	-.0515	-.0457	-.0518	-.0188	-.0262	-.0077	-.0124
100.000	-.0887	-.0818	-.0580	-.0512	-.0475	-.0454	-.0429	-.0448	-.0448	-.0448	-.0527	-.0585	-.0262	-.0188	-.0132
110.000	-.0580	-.0912	-.0483	-.0444	-.0424	-.0595	-.0592	-.0402	-.0411	-.0429	-.0439	-.0467	-.0262	-.0448	-.0307
120.000						-.0405								-.0448	
130.000						-.0225								-.0383	
140.000						-.0132								-.0262	
150.000						-.0142								-.0169	

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

IA35 ORBITER ASCENT CONFIGURATION (R05002)

MACH (1) = 2.500 ALPHA (3) = -1.950

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI														-.0142	
160.000						-.0216								-.0123	
170.000						-.0216									
180.000	-.0124	-.0114	-.0114	-.0114	-.0153	-.0169	-.0179	-.0179	-.0188	-.0234	-.0160	-.0327	-.0169	-.0160	-.0143

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.0124		
80.000							-.0006	.0040	-.0124
70.000							.0341	.0003	-.0225
60.000							.0177	-.0097	-.0261
90.000	-.0124	-.0243	-.0288	-.0270	-.0197	.0286			
100.000	-.0108	-.0143	-.0161	-.0124	.0241	.0367			
110.000	-.0225	-.0179	-.0179	.0250	.0578	.0195			
120.000						.0736			
130.000						.2214			
140.000						.3305			
150.000						.3428			
160.000						.2355			
170.000						.2082			
180.000	-.0079	-.0108	-.0161	.0013	.1906	.3542			

MACH (1) = 2.500 ALPHA (4) = -.010 RN/L = 2.4969 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1500	.1357	.0977												
70.000	.1614	.1349	.0932												
60.000	.1667	.1588	.1056												
90.000			.1136	.0498	-.0058	-.0077	-.0049	-.0262	-.0428	-.0576	-.0678	-.0742	-.0792	-.0792	-.0802
100.000						-.0511	-.0317	-.0123	-.0308	-.0520	-.0650	-.0751	-.0822	-.0851	-.0851
110.000						-.1001	-.0983	-.1075	-.1066	-.0963	-.0456	-.0607	-.0705	-.0744	-.0775
120.000						-.0536								-.0548	
130.000						-.0613								-.0588	
140.000						-.0955								-.0607	
150.000						-.0918								-.0490	
160.000						-.0881								-.0344	
170.000						-.0862								-.0285	
180.000						-.0862	-.0733	-.0585	-.0446	-.0363	-.0336	-.0304	-.0295	-.0304	-.0314

X/L	.45	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															

IA35 ORBITER ASCENT CONFIGURATION (RQ5002)

MACH (1) = 2.500 ALPHA (4) = -.010

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0792	-.0792	-.0773	-.0753	-.0724	-.0705	-.0692	-.0702	-.0674	-.0619	-.0490	-.0324	-.0352	-.0260	-.0319
100.000	-.0832	-.0783	-.0734	-.0685	-.0656	-.0633	-.0610	-.0610	-.0600	-.0610	-.0499	-.0536	-.0352	-.0352	-.0319
110.000	-.0744	-.0695	-.0636	-.0578	-.0558	-.0539	-.0536	-.0554	-.0536	-.0536	-.0527	-.0582	-.0379	-.0573	-.0477
120.000						-.0490								-.0573	
130.000						-.0370								-.0499	
140.000						-.0269								-.0407	
150.000						-.0241								-.0308	
160.000						-.0278								-.0306	
170.000						-.0342								-.0278	
180.000	-.0295	-.0304	-.0295	-.0314	-.0344	-.0324	-.0342	-.0342	-.0315	-.0306	-.0333	-.0370	-.0287	-.0296	-.0301

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8520	.9000	.9400
PHI									
60.000							-.0301		
70.000							-.0245	-.0217	-.0301
80.000							.0033	-.0162	-.0366
90.000	-.0338	-.0468	-.0505	-.0459	-.0384	.0070	-.0023	-.0227	-.0394
100.000	-.0282	-.0319	-.0301	-.0301	.0061	.0172			
110.000	-.0394	-.0338	-.0301	.0070	.0365	-.0060			
120.000						.0582			
130.000						.2066			
140.000						.2983			
150.000						.2992			
160.000						.2031			
170.000						.1811			
180.000	-.0347	-.0310	-.0319	.0015	.1643	.3089			

MACH (1) = 2.500 ALPHA (5) = 1.990 RN/L = 2.4989 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4210
PHI															
80.000	.1702	.1012	.0738												
70.000	.1031	.1049	.0712												
80.000	.1587	.1454	.0971												
90.000			.1012	.0420	.0037	-.0083	-.0249	-.0336	-.0344	-.0673	-.0747	-.0880	-.0910	-.0904	-.0983
100.000						-.0387	-.0137	-.0249	-.0452	-.0606	-.0747	-.0849	-.0891	-.0909	-.0902
110.000						-.0931	-.0966	-.0997	-.0461	-.0498	-.0691	-.0747	-.0891	-.0914	-.0923
120.000						-.0442								-.0691	
130.000						-.0710								-.0593	
140.000						-.1042								-.0570	
150.000						-.1023								-.0602	

IA35 ORBITER ASCENT CONFIGURATION (R05002)

MACH (1) = 2.500 ALPHA (2) = 1.990

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
180.000						-.0936								-.0495	
170.000						-.0968								-.0458	
160.000						-.0977	-.0857	-.0710	-.0599	-.0535	-.0498	-.0495	-.0476	-.0476	-.0495

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0933	-.0933	-.0923	-.0894	-.0875	-.0855	-.0838	-.0810	-.0773	-.0699	-.0587	-.0531	-.0467	-.0429	-.0479
100.000	-.0972	-.0933	-.0865	-.0836	-.0826	-.0787	-.0773	-.0773	-.0754	-.0726	-.0587	-.0531	-.0457	-.0439	-.0433
110.000	-.0894	-.0848	-.0787	-.0739	-.0719	-.0690	-.0630	-.0680	-.0699	-.0699	-.0699	-.0699	-.0457	-.0615	-.0525
120.000						-.0632								-.0708	
130.000						-.0531								-.0574	
140.000						-.0420								-.0541	
150.000						-.0364								-.0478	
160.000						-.0402								-.0448	
170.000						-.0457								-.0448	
180.000	-.0486	-.0478	-.0478	-.0478	-.0505	-.0494	-.0494	-.0467	-.0448	-.0457	-.0531	-.0467	-.0439	-.0457	-.0461

X/L	.7290	.7470	.7870	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0433		
70.000							-.0415	-.0304	-.0433
80.000							-.0184	-.0267	-.0442
90.000	-.0489	-.0808	-.0818	-.0599	-.0316	-.0120	-.0101	-.0295	-.0470
100.000	-.0360	-.0433	-.0415	-.0378	-.0074	.0000			
110.000	-.0481	-.0406	-.0396	-.0057	.0258	-.0101			
120.000						.0839			
130.000						.2120			
140.000						.2899			
150.000						.2567			
160.000						.1899			
170.000						.1542			
180.000	-.0468	-.0433	-.0452	.0349	.1340	.2585			

IA35 ORBITER ASCENT CONFIGURATION (RQ5002)

MACH (1) = 2.500 ALPHA (0) = 4.000 RN/L = 2.4909 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1444	.0737	.0498												
70.000	.1453	.0790	.0489												
80.000	.1471	.1089	.0804												
90.000			.0790	.0210	.0063	-.0269	-.0398	-.0517	-.0637	-.0748	-.0849	-.0804	-.0978	-.0398	-.1047
100.000						-.0278	-.0289	-.0407	-.0582	-.0729	-.0840	-.0932	-.1017	-.1057	-.1096
110.000						-.0257	-.0812	-.0941	-.0455	-.0665	-.0851	-.0929	-.1017	-.1047	-.1066
120.000						-.0382								-.0762	
130.000						-.0667								-.0683	
140.000						-.1171								-.0742	
150.000						-.1134								-.0742	
160.000						-.1079								-.0683	
170.000						-.1079								-.0634	
180.000						-.1070	-.0987	-.0840	-.0775	-.0711	-.0674	-.0673	-.0655	-.0653	-.0653

X/L	.4900	.4680	.4960	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.1088	-.1076	-.1076	-.1057	-.1037	-.0998	-.0955	-.0927	-.0853	-.0770	-.0659	-.0567	-.0585	-.0502	-.0542
100.000	-.1088	-.1078	-.1047	-.1007	-.0978	-.0948	-.0909	-.0899	-.0890	-.0825	-.0659	-.0659	-.0576	-.0502	-.0505
110.000	-.1047	-.0998	-.0948	-.0889	-.0880	-.0850	-.0825	-.0825	-.0816	-.0825	-.0807	-.0715	-.0576	-.0841	-.0542
120.000						-.0732								-.0807	
130.000						-.0631								-.0770	
140.000						-.0548								-.0668	
150.000						-.0493								-.0604	
160.000						-.0502								-.0585	
170.000						-.0576								-.0585	
180.000	-.0844	-.0844	-.0853	-.0863	-.0883	-.0631	-.0822	-.0813	-.0585	-.0576	-.0576	-.0585	-.0585	-.0613	-.0597

X/L	.7290	.7470	.7870	.7830	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0496		
70.000							-.0505	-.0450	-.0570
80.000							-.0395	-.0377	-.0535
90.000	-.0597	-.0880	-.0716	-.0795	-.0845	-.0905	-.0248	-.0331	-.0535
100.000	-.0478	-.0535	-.0524	-.0487	-.0186	.0027			
110.000	-.0505	-.0450	-.0425	-.0083	.0275	-.0120			
120.000						.0391			
130.000						.2110			
140.000						.2417			
150.000						.2294			
160.000						.1453			
170.000						.1321			
180.000	-.0542	-.0551	-.0535	.0374	.1005	.2084			

IA35 ORBITER ASCENT CONFIGURATION (R05002)

MACH (1) = 2.500 ALPHA (7) = 5.990 RN/L = 2.4989 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1034	.0455	.0551												
70.000	.1159	.0489	.0400												
80.000	.1257	.0771	.0409												
90.000			.0524	.0127	-.0003	-.0400	-.0511	-.0631	-.0724	-.0844	-.0918	-.0973	-.1052	-.1082	-.1141
100.000						-.0262	-.0410	-.0539	-.0696	-.0825	-.0918	-.1010	-.1101	-.1141	-.1190
110.000						-.0696	-.0705	-.0576	-.0585	-.0807	-.0936	-.1042	-.1121	-.1151	-.1170
120.000						-.0705								-.0884	
130.000						-.0973								-.0756	
140.000						-.1269								-.0756	
150.000						-.1232								-.0845	
160.000						-.1186								-.0835	
170.000						-.1167								-.0805	
180.000						-.1177	-.1093	-.0992	-.0946	-.0899	-.0862	-.0874	-.0835	-.0835	-.0835

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.1170	-.1190	-.1190	-.1180	-.1161	-.1121	-.1075	-.1029	-.0936	-.0816	-.0687	-.0804	-.0735	-.0539	-.0804
100.000	-.1200	-.1190	-.1180	-.1141	-.1111	-.1082	-.1047	-.1020	-.0992	-.0918	-.0678	-.0850	-.0696	-.0539	-.0557
110.000	-.1151	-.1111	-.1052	-.1022	-.1022	-.0993	-.0973	-.0964	-.0955	-.0936	-.0899	-.0835	-.0687	-.0631	-.0557
120.000						-.0894								-.0899	
130.000						-.0751								-.0890	
140.000						-.0678								-.0788	
150.000						-.0613								-.0724	
160.000						-.0622								-.0715	
170.000						-.0659								-.0705	
180.000	-.0825	-.0825	-.0815	-.0795	-.0785	-.0751	-.0733	-.0724	-.0715	-.0705	-.0696	-.0770	-.0696	-.0724	-.0715

X/L	.7290	.7470	.7870	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0493		
70.000							-.0668	-.0500	-.0668
80.000							-.0456	-.0483	-.0831
90.000	-.0831	-.0715	-.0742	-.0781	-.0850	-.0363	-.0036	-.0382	-.0576
100.000	-.0511	-.0822	-.0804	-.0537	-.0243	-.0141			
110.000	-.0520	-.0493	-.0485	-.0105	.0256	.0016			
120.000						.0479			
130.000						.2083			
140.000						.2250			
150.000						.2259			
160.000						.1321			
170.000						.1180			
180.000	-.0841	-.0850	-.0831	.0228	.0731	.1855			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (R05002)

IA35 ORBITER ASCENT CONFIGURATION

MACH (2) = 2.950 ALPHA (1) = -6.000 RN/L = 2.5159 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2090	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1695	.1980	.1818												
70.000	.2000	.1980	.1439												
80.000	.2678	.1808	.1449												
90.000			.1239	.0828	.0420	.0047	-.0056	-.0139	-.0212	-.0263	-.0274	-.0245	-.0176	-.0110	-.0077
100.000						-.0816	-.0595	-.0326	-.0159	-.0149	-.0191	-.0253	-.0297	-.0308	-.0121
110.000						-.0792	-.0750	-.0802	-.0864	-.0875	-.0825	-.0738	-.0617	-.0582	-.0596
120.000						.0517								-.0485	
130.000						.0079								-.0541	
140.000						-.0212								-.0110	
150.000						-.0118								.0130	
160.000						-.0077								.0245	
170.000						-.0056								.0309	
180.000						-.0046	.0058	.0172	.0255	.0338	.0358	.0342	.0342	.0331	.0309

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0066	-.0066	-.0055	-.0011	.0055	.0055	.0067	.0077	.0067	.0097	.0067	.0108	.0108	.0221	.0327
100.000	-.0011	-.0011	.0011	.0055	.0055	.0066	.0108	.0108	.0097	.0067	.0067	.0097	.0118	.0211	.0172
110.000	-.0253	-.0055	.0000	.0000	.0000	-.0165	.0056	.0048	.0056	.0056	.0067	.0108	.0118	.0067	.0141
120.000						-.0284								.0077	
130.000						-.0108								.0097	
140.000						-.0108								.0097	
150.000						-.0016								.0128	
160.000						.0108								.0139	
170.000						.0231								.0169	
180.000	.0909	.0909	.0342	.0384	.0320	.0344	.0355	.0334	.0324	.0056	.0056	.0108	.0118	.0221	.0161

X/L	.7290	.7470	.7870	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							.0203		
70.000							.0431	.0514	.0275
80.000							.0907	.0485	.0203
90.000	.0338	.0213	.0192	.0809	.0234	.0731	.0869	.0275	.0141
100.000	.0296	.0224	.0285	.0296	.0838	.0866			
110.000	.0885	.0898	.0308	.0700	.1021	.0721			
120.000						.0866			
130.000						.3016			
140.000						.4175			
150.000						.4192			
160.000						.2634			
170.000						.2360			
180.000	.0289	.0244	.0234	.0431	.2086	.3379			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC SPWT 1083)

IA35 ORBITER ASCENT CONFIGURATION (R03002)

MACH (2) = 2.990 ALPHA (2) = -4.000 RN/L = 2.3159 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0070	.1200	.1840	.2050	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1841	.1671	.1504												
70.000	.1789	.1671	.1347												
80.000	.2339	.1514	.1347												
90.000			.1185	.0093	.0231	-.0090	-.0162	-.0224	-.0276	-.0338	-.0328	-.0255	-.0178	-.0178	-.0222
100.000						-.0410	-.0348	-.0203	-.0214	-.0307	-.0348	-.0379	-.0387	-.0332	-.0167
110.000						-.0762	-.0710	-.0793	-.0876	-.0917	-.0886	-.0794	-.0673	-.0618	-.0475
120.000						.0159								-.0552	
130.000						-.0079								-.0475	
140.000						-.0379								-.0288	
150.000						-.0307								-.0101	
160.000						-.0276								.0009	
170.000						-.0255								.0086	
180.000						-.0245	-.0162	-.0069	.0014	.0097	.0107	.0097	.0097	.0097	.0075

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5810	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0222	-.0222	-.0200	-.0167	-.0134	-.0134	-.0059	-.0070	-.0070	-.0070	-.0015	-.0015	-.0015	-.0015	.0070
100.000	-.0167	-.0167	-.0145	-.0101	-.0090	-.0079	.0028	.0017	.0017	-.0003	-.0026	-.0015	-.0015	.0006	-.0033
110.000	-.0255	-.0145	-.0125	-.0112	-.0112	-.0101	-.0005	.0006	.0006	.0017	-.0026	-.0015	-.0015	-.0015	-.0095
120.000						-.0145								.0006	
130.000						-.0113								-.0005	
140.000						-.0091								-.0005	
150.000						-.0048								.0006	
160.000						.0050								-.0005	
170.000						.0180								.0006	
180.000	.0075	.0108	.0163	.0185	.0174	.0268	.0268	.0254	.0234	.0050	-.0015	-.0015	-.0015	.0006	.0008

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
80.000							-.0013		
70.000							.0122	.0204	.0099
80.000							.0534	.0235	-.0013
90.000	.0111	.0039	-.0054	-.0054	-.0002	.0421	.0421	.0142	-.0033
100.000	.0101	.0060	.0101	.0122	.0410	.0585			
110.000	-.0013	.0049	.0101	.0441	.0899	.0390			
120.000						.0812			
130.000						.2720			
140.000						.3701			
150.000						.3622			
160.000						.2406			
170.000						.2112			
180.000	.0039	.0039	.0008	.0080	.1841	.4093			

IA35 ORBITER ASCENT CONFIGURATION (R05002)

MACH (2) = 2.950 ALPHA (3) = -2.000 RN/L = 2.3159 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1840	.2090	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1586	.1448	.1438												
70.000	.1558	.1412	.1142												
80.000	.2028	.1438	.1205												
90.000			.1174	.0743	.0060	-.0825	-.0276	-.0318	-.0370	-.0360	-.0276	-.0223	-.0265	-.0287	-.0331
100.000						-.0318	-.0425	-.0381	-.0331	-.0444	-.0465	-.0433	-.0320	-.0265	-.0278
110.000						-.0738	-.0738	-.0801	-.0896	-.0959	-.0938	-.0760	-.0606	-.0540	-.0287
120.000						.3008								-.0617	
130.000						-.0234								-.0562	
140.000						-.0539								-.0430	
150.000						-.0497								-.0276	
160.000						-.0454								-.0166	
170.000						-.0433								-.0111	
180.000						-.0433	-.0370	-.0286	-.0225	-.0150	-.0118	-.0100	-.0111	-.0111	-.0111

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0331	-.0331	-.0331	-.0320	-.0298	-.0320	-.0380	-.0390	-.0401	-.0401	-.0380	-.0357	-.0326	-.0315	-.0166
100.000	-.0320	-.0320	-.0287	-.0265	-.0254	-.0243	-.0285	-.0294	-.0294	-.0305	-.0326	-.0326	-.0326	-.0305	-.0258
110.000	-.0221	-.0166	-.0166	-.0166	-.0138	-.0188	-.0240	-.0250	-.0240	-.0230	-.0326	-.0326	-.0326	-.0305	-.0249
120.000						-.0166								-.0305	
130.000						-.0240								-.0166	
140.000						-.0294								-.0166	
150.000						-.0285								-.0176	
160.000						-.0208								-.0166	
170.000						-.0134								-.0176	
180.000	-.0077	-.0044	.0000	.0011	.0000	-.0059	-.0069	-.0080	-.0101	-.0187	-.0305	-.0326	-.0305	-.0166	-.0145

X/L	.7290	.7470	.7670	.7850	.9090	.8290	.8620	.9000	.9400
PHI									
60.000							-.0228		
70.000							-.0145	-.0072	-.0166
80.000							.0177	.0022	-.0207
90.000	-.0134	-.0258	-.0270	-.0280	-.0249	.0125	.0229	-.0072	-.0207
100.000	-.0114	-.0134	-.0080	-.0062	.0177	.0323			
110.000	-.0145	-.0186	-.0114	.0187	.0408	.0253			
120.000						.0824			
130.000						.2497			
140.000						.3330			
150.000						.3165			
160.000						.2144			
170.000						.1957			
180.000	-.0103	-.0103	-.0094	-.0103	.1585	.3379			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1083) (R05002)

IA35 ORBITER ASCENT CONFIGURATION

MACH (2) = 2.950 ALPHA (4) = -.010 RN/L = 2.5159 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2620	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI															
60.000	.1545	.1388	.1388												
70.000	.1457	.1388	.0883												
80.000	.1732	.1398	.1049												
90.000			.1153	.0530	-.0083	-.0343	-.0384	-.0418	-.0426	-.0312	-.0260	-.0312	-.0377	-.0399	-.0444
100.000						-.0395	-.0436	-.0509	-.0468	-.0509	-.0468	-.0332	-.0333	-.0366	-.0444
110.000						-.0769	-.0748	-.0810	-.0893	-.0935	-.0875	-.0688	-.0543	-.0444	-.0344
120.000						-.0073								-.0710	
130.000						-.0322								-.0676	
140.000						-.0644								-.0577	
150.000						-.0823								-.0410	
160.000						-.0592								-.0333	
170.000						-.0571								-.0277	
180.000						-.0571	-.0530	-.0488	-.0395	-.0343	-.0312	-.0288	-.0277	-.0277	-.0288

X/L	.4500	.4680	.4980	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0455	-.0477	-.0477	-.0488	-.0477	-.0499	-.0482	-.0503	-.0513	-.0523	-.0503	-.0337	-.0347	-.0378	-.0373
100.000	-.0477	-.0477	-.0488	-.0444	-.0444	-.0444	-.0420	-.0430	-.0441	-.0441	-.0451	-.0441	-.0347	-.0409	-.0393
110.000	-.0355	-.0344	-.0344	-.0344	-.0344	-.0344	-.0327	-.0327	-.0316	-.0316	-.0441	-.0358	-.0347	-.0368	-.0403
120.000						-.0288								-.0296	
130.000						-.0244								-.0244	
140.000						-.0275								-.0171	
150.000						-.0316								-.0161	
160.000						-.0296								-.0192	
170.000						-.0244								-.0254	
180.000	-.0233	-.0211	-.0177	-.0177	-.0199	-.0192	-.0202	-.0233	-.0233	-.0316	-.0327	-.0347	-.0347	-.0296	-.0280

X/L	.7290	.7470	.7870	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0414		
70.000							-.0352	-.0280	-.0300
80.000							-.0104	-.0146	-.0300
90.000	-.0321	-.0403	-.0434	-.0434	-.0403	-.0115	.0050	-.0166	-.0321
100.000	-.0269	-.0290	-.0259	-.0249	-.0052	.0092			
110.000	-.0300	-.0342	-.0269	.0009	.0228	-.0001			
120.000						.0401			
130.000						.2260			
140.000						.2956			
150.000						.2632			
160.000						.1809			
170.000						.1711			
180.000	-.0238	-.0220	-.0249	-.0115	.1368	.2867			

IA35 ORBITER ASCENT CONFIGURATION (R05002)

MACH (2) = 2.950 ALPHA (5) = 2.000 RN/L = 2.5159 BETA = 4.0900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1391	.1239	.1197												
70.000	.1291	.1239	.0769												
80.000	.1489	.1208	.0895												
90.000			.1041	.0331	-.0118	-.0358	-.0379	-.0410	-.0506	-.0274	-.0316	-.0410	-.0505	-.0527	-.0605
100.000						-.0347	-.0420	-.0452	-.0483	-.0441	-.0337	-.0368	-.0482	-.0527	-.0805
110.000						-.0650	-.0892	-.0775	-.0827	-.0827	-.0681	-.0494	-.0382	-.0416	-.0505
120.000						-.0201								-.0728	
130.000						-.0441								-.0739	
140.000						-.0744								-.0683	
150.000						-.0744								-.0560	
160.000						-.0723								-.0494	
170.000						-.0702								-.0416	
180.000						-.0692	-.0671	-.0608	-.0556	-.0640	-.0483	-.0460	-.0427	-.0416	-.0382

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0816	-.0818	-.0818	-.0827	-.0827	-.0827	-.0832	-.0843	-.0854	-.0854	-.0843	-.0475	-.0590	-.0517	-.0502
100.000	-.0827	-.0850	-.0850	-.0838	-.0816	-.0805	-.0801	-.0801	-.0811	-.0811	-.0832	-.0811	-.0590	-.0559	-.0522
110.000	-.0560	-.0583	-.0594	-.0583	-.0560	-.0505	-.0517	-.0517	-.0506	-.0496	-.0632	-.0611	-.0590	-.0527	-.0543
120.000						-.0449								-.0464	
130.000						-.0317								-.0454	
140.000						-.0307								-.0349	
150.000						-.0549								-.0286	
160.000						-.0391								-.0307	
170.000						-.0391								-.0349	
180.000	-.0382	-.0360	-.0349	-.0349	-.0382	-.0370	-.0380	-.0391	-.0401	-.0496	-.0475	-.0601	-.0569	-.0401	-.0388

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8820	.9000	.9400
PHI									
80.000							-.0522		
70.000							-.0470	-.0450	-.0439
80.000							-.0356	-.0336	-.0398
90.000	-.0481	-.0555	-.0555	-.0574	-.0543	-.0305	-.0211	-.0284	-.0398
100.000	-.0419	-.0439	-.0439	-.0408	-.0222	-.0025			
110.000	-.0502	-.0470	-.0439	-.0180	.0089	-.0058			
120.000						-.0201			
130.000						.1980			
140.000						.2588			
150.000						.2441			
160.000						.1508			
170.000						.1371			
180.000	-.0398	-.0348	-.0398	-.0087	.1053	.2107			

IA35 ORBITER ASCENT CONFIGURATION (R05002)

MACH (2) = 2.950 ALPHA (8) = 4.310 RN/L = 2.5159 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1226	.1026	.1015												
70.000	.1120	.1026	.0825												
80.000	.1279	.1015	.0952												
90.000			.1036	.0414	-.0168	-.0440	-.0482	-.0429	-.0334	-.0398	-.0482	-.0538	-.0617	-.0661	-.0706
100.000						-.0366	-.0450	-.0514	-.0503	-.0429	-.0429	-.0514	-.0606	-.0639	-.0717
110.000						-.0335	-.0398	-.0651	-.0693	-.0693	-.0630	-.0505	-.0561	-.0595	-.0695
120.000						-.0239								-.0784	
130.000						-.0335								-.0750	
140.000						-.0851								-.0739	
150.000						-.0861								-.0650	
160.000						-.0840								-.0617	
170.000						-.0830								-.0539	
180.000						-.0819	-.0788	-.0756	-.0693	-.0661	-.0640	-.0606	-.0561	-.0550	-.0517

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0717	-.0728	-.0739	-.0750	-.0762	-.0784	-.0765	-.0776	-.0776	-.0776	-.0755	-.0713	-.0692	-.0661	-.0609
100.000	-.0750	-.0762	-.0739	-.0762	-.0750	-.0739	-.0724	-.0724	-.0713	-.0724	-.0755	-.0713	-.0692	-.0661	-.0619
110.000	-.0739	-.0750	-.0750	-.0728	-.0717	-.0650	-.0651	-.0651	-.0651	-.0640	-.0755	-.0713	-.0692	-.0661	-.0682
120.000						-.0583								-.0661	
130.000						-.0400								-.0619	
140.000						-.0369								-.0536	
150.000						-.0380								-.0411	
160.000						-.0442								-.0411	
170.000						-.0484								-.0442	
180.000	-.0494	-.0483	-.0483	-.0494	-.0517	-.0505	-.0515	-.0515	-.0505	-.0630	-.0724	-.0703	-.0692	-.0463	-.0494

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0567		
70.000							-.0567	-.0536	-.0578
80.000							-.0484	-.0526	-.0515
90.000	-.0588	-.0630	-.0599	-.0661	-.0630	-.0421	-.0369	-.0380	-.0442
100.000	-.0536	-.0537	-.0546	-.0536	-.0359	-.0202			
110.000	-.0599	-.0567	-.0505	-.0286	-.0014	-.0181			
120.000						-.0004			
130.000						.1428			
140.000						.2242			
150.000						.2153			
160.000						.1133			
170.000						.1164			
180.000	-.0442	-.0483	-.0484	-.0160	.0747	.1604			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1065) (R03002)

IA35 ORBITER ASCENT CONFIGURATION

MACH (2) = 2.950 ALPHA (7) = 6.020 RN/L = 2.5159 BETA = 4.0300

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0970	.1260	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1258	.0843	.0985												
70.000	.1134	.0840	.0492												
80.000	.1175	.0806	.0841												
90.000			.0860	.0086	-.0417	-.0584	-.0532	-.0375	-.0458	-.0532	-.0595	-.0847	-.0713	-.0725	-.0780
100.000						-.0542	-.0574	-.0583	-.0417	-.0448	-.0542	-.0657	-.0713	-.0747	-.0805
110.000						-.0637	-.0699	-.0752	-.0741	-.0647	-.0521	-.0602	-.0691	-.0747	-.0825
120.000						-.0912								-.0892	
130.000						-.0584								-.0859	
140.000						-.0919								-.0905	
150.000						-.0919								-.0715	
160.000						-.0898								-.0869	
170.000						-.0888								-.0813	
180.000						-.0868	-.0846	-.0814	-.0783	-.0731	-.0710	-.0891	-.0869	-.0646	-.0824

X/L	.4500	.4680	.4860	.5050	.5240	.5480	.5810	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0780	-.0803	-.0825	-.0836	-.0859	-.0870	-.0864	-.0875	-.0875	-.0843	-.0738	-.0885	-.0738	-.0833	-.0830
100.000	-.0925	-.0836	-.0849	-.0859	-.0848	-.0848	-.0833	-.0822	-.0822	-.0812	-.0801	-.0885	-.0727	-.0864	-.0819
110.000	-.0848	-.0859	-.0848	-.0836	-.0814	-.0789	-.0770	-.0739	-.0759	-.0759	-.0770	-.0759	-.0727	-.0727	-.0861
120.000						-.0702								-.0654	
130.000						-.0507								-.0622	
140.000						-.0465								-.0559	
150.000						-.0465								-.0528	
160.000						-.0549								-.0538	
170.000						-.0612								-.0580	
180.000	-.0813	-.0813	-.0813	-.0813	-.0635	-.0633	-.0643	-.0654	-.0654	-.0738	-.0696	-.0727	-.0727	-.0612	-.0598

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0598		
70.000							-.0567	-.0567	-.0619
80.000							-.0483	-.0525	-.0577
90.000	-.0819	-.0881	-.0598	-.0871	-.0840	-.0421	-.0390	-.0431	-.0473
100.000	-.0957	-.0588	-.0977	-.0577	-.0421	-.0275			
110.000	-.0588	-.0567	-.0536	-.0538	-.0014	-.0202			
120.000						.0434			
130.000						.1022			
140.000						.1879			
150.000						.2016			
160.000						.1008			
170.000						.0967			
180.000	-.0957	-.0588	-.0536	-.0508	.0487	.1458			

IA35 ORBITER ASCENT CONFIGURATION (R05002)

MACH (3) = 4.000 ALPHA (1) = -6.000 RN/L = 3.4990 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2655	.2606	.2504												
70.000	.2663	.2543	.2504												
80.000	.3115	.2657	.2477												
90.000			.2477	.2349	.2169	.2106	.1907	.1907	.1907	.1930	.1930	.1932	99.9999	99.9999	99.9999
100.000						.1975	.1907	.1907	.1907	.1930	.1930	.1932	99.9999	99.9999	99.9999
110.000						.1884	.1907	.1907	.1907	.1930	.1930	99.9999	99.9999	99.9999	99.9999
120.000						.1884								99.9999	
130.000						.1884								99.9999	
140.000						.1884								99.9999	
150.000						.1884								99.9999	
160.000						.1884								99.9999	
170.000						.1884								99.9999	
180.000						.1930	.1907	.1907	.1930	.1930	.1932	99.9999	99.9999	99.9999	99.9999

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	99.9999	99.9999	99.9999	99.9999	99.9999	99.9999	.0053	.0075	.0075	.0083	.0097	.0112	.0164	.0149	.0141
100.000	99.9999	99.9999	99.9999	99.9999	99.9999	99.9999	-.0087	-.0050	.0016	.0083	.0112	.0120	.0142	.0164	.0125
110.000	99.9999	99.9999	99.9999	99.9999	99.9999	99.9999	-.0124	-.0073	-.0021	.0023	.0090	.0105	.0149	.0149	.0094
120.000						99.9999								.0149	
130.000						-.0117								.0023	
140.000						.0016								.0083	
150.000						.0134								.0164	
160.000						.0216								.0238	
170.000						.0282								.0326	
180.000	99.9999	99.9999	99.9999	99.9999	99.9999	.0312	.0319	.0334	.0371	.0393	.0408	.0430	.0149	.0415	.0405

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0022		
70.000							.0046	.0272	.0267
80.000							.0498	.0534	.0340
90.000	.0230	.0195	.0220	.0167	.0178	.0319	.0781	.0445	.0251
100.000	.0199	.0178	.0214	.0288	.0335	.0645			
110.000	.0130	.0178	.0214	.0419	.0786	.0665			
120.000						.1269			
130.000						.3153			
140.000						.3841			
150.000						.4048			
160.000						.2248			
170.000						.1941			
180.000	.0445	.0381	.0382	.0324	.1589	.2634			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063)

(R85002)

IA35 ORBITER ASCENT CONFIGURATION

MACH (3) = 4.000 ALPHA (2) = -4.000 RN/L = 3.4990 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1940	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1382	.1315	.1005												
70.000	.1820	.1191	.1066												
80.000	.2555	.1358	.1091												
90.000			.1019	.0825	.0228	.0051	.0013	-.0030	-.0082	-.0135	-.0173	-.0197	99.9999	99.9999	99.9999
100.000						-.0225	-.0263	-.0263	-.0225	-.0163	-.0049	-.0011	99.9999	99.9999	99.9999
110.000						-.0426	-.0426	-.0445	-.0468	-.0488	-.0540	99.9999	99.9999	99.9999	99.9999
120.000						.0504								99.9999	
130.000						.0523								99.9999	
140.000						.0008								99.9999	
150.000						.0013								99.9999	
160.000						.0047								99.9999	
170.000						.0042									
180.000						.0089	.0099	.0152	.0161	.0190	.0147	99.9999	99.9999	99.9999	99.9999

X/L	.4900	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	99.9999	99.9999	99.9999	99.9999	99.9999	99.9999	-.0035	-.0035	-.0043	-.0058	-.0058	-.0058	.0078	.0041	-.0048
100.000	99.9999	99.9999	99.9999	99.9999	99.9999	99.9999	-.0068	-.0035	-.0035	-.0020	-.0020	-.0028	.0041	-.0020	-.0043
110.000	99.9999	99.9999	99.9999	99.9999	99.9999	99.9999	-.0202	-.0172	-.0119	-.0088	-.0068	-.0058	-.0013	-.0051	-.0053
120.000						99.9999								-.0058	
130.000						-.0286								-.0111	
140.000						-.0217								-.0088	
150.000						-.0126								-.0028	
160.000						-.0058								.0041	
170.000						-.0005								.0101	
180.000	99.9999	99.9999	99.9999	99.9999	99.9999	.0041	.0063	.0101	.0124	.0147	.0170	.0154	.0041	.0154	.0155

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0187		
70.000							-.0144	.0037	.0043
80.000							.0225	.0310	.0118
90.000	.0092	-.0016	.0000	-.0043	-.0037	.0118	.0545	.0283	.0089
100.000	.0037	.0021	.0092	.0107	.0198	.0417			
110.000	-.0016	.0021	.0043	.0275	.0567	.0470			
120.000						.0861			
130.000						.3054			
140.000						.3476			
150.000						.3402			
160.000						.1727			
170.000						.1361			
180.000	.0192	.0182	.0155	.0214	.0978	.2853			

IA35 ORBITER ASCENT CONFIGURATION (RQ5002)

MACH (3) = 4.000 ALPHA (3) = -2.000 RN/L = 3.4990 BETA = 4.0900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1291	.1217	.0992												
70.000	.1605	.1138	.0992												
80.000	.2018	.1198	.0992												
90.000			.0987	.0485	.0179	-.0036	-.0084	-.0132	-.0175	-.0213	-.0233	-.0247	99.9999	99.9999	99.9999
100.000						-.0190	-.0194	-.0151	-.0099	-.0094	-.0113	-.0161	99.9999	99.9999	99.9999
110.000						-.0434	-.0414	-.0443	-.0472	-.0501	-.0501	99.9999	99.9999	99.9999	99.9999
120.000						.0342								99.9999	
130.000						.0174								99.9999	
140.000						-.0118								99.9999	
150.000						-.0127								99.9999	
160.000						-.0099								99.9999	
170.000						-.0103								99.9999	
180.000						-.0056	-.0051	-.0032	-.0013	.0002	.0026	99.9999	99.9999	99.9999	99.9999

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	99.9999	99.9999	99.9999	99.9999	99.9999	99.9999	-.0145	-.0145	-.0145	-.0153	-.0153	-.0145	-.0008	-.0099	-.0171
100.000	99.9999	99.9999	99.9999	99.9999	99.9999	99.9999	-.0084	-.0069	-.0061	-.0061	-.0069	-.0092	-.0038	-.0130	-.0155
110.000	99.9999	99.9999	99.9999	99.9999	99.9999	99.9999	-.0176	-.0130	-.0107	-.0099	-.0099	-.0107	-.0054	-.0145	-.0155
120.000						99.9999								-.0138	
130.000						-.0267								-.0191	
140.000						-.0252								-.0183	
150.000						-.0221								-.0160	
160.000						-.0168								-.0115	
170.000						-.0115								-.0069	
180.000	99.9999	99.9999	99.9999	99.9999	99.9999	-.0069	-.0054	-.0038	-.0015	.0000	.0007	-.0008	-.0046	-.0038	-.0027

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0505		
70.000							-.0235	-.0128	-.0118
80.000							.0021	.0091	-.0048
90.000	-.0107	-.0144	-.0171	-.0178	-.0182	-.0037	.0299	.0118	-.0080
100.000	-.0088	-.0098	-.0075	-.0032	.0084	.0235			
110.000	-.0125	-.0118	-.0075	.0134	.0401	.0315			
120.000						.0626			
130.000						.2724			
140.000						.3065			
150.000						.2792			
160.000						.1518			
170.000						.1374			
180.000	.0000	-.0021	-.0048	.0000	.0588	.3325			

IA35 ORBITER ASCENT CONFIGURATION (R03002)

MACH (3) = 4.000 ALPHA (4) = .000 RN/L = 3.4990 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.1160	.1085	.0780												
70.000	.1395	.1052	.0898												
80.000	.1725	.1056	.0937												
90.000			.0932	.0344	.0129	-.0047	-.0105	-.0143	-.0188	-.0229	-.0262	-.0281	-.0306	-.0313	-.0323
100.000						-.0138	-.0129	-.0103	-.0114	-.0172	-.0219	-.0267	-.0308	-.0328	-.0348
110.000						-.5406	-.0391	-.0450	-.0468	-.0511	-.0516	-.0512	-.0462	-.0398	-.0323
120.000						.0201								-.0437	
130.000						.0039								-.0422	
140.000						-.0224								-.0333	
150.000						-.0243								-.0224	
160.000						-.0224								-.0195	
170.000						-.0224								-.0185	
180.000						-.0186	-.0186	-.0178	-.0162	-.0153	-.0129	-.0135	-.0170	-.0180	-.0175

X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0308	-.0294	-.0274	-.0254	-.0249	-.0249	-.0236	-.0251	-.0259	-.0266	-.0274	-.0268	-.0188	-.0236	-.0290
100.000	-.0345	-.0325	-.0308	-.0284	-.0259	-.0259	-.0221	-.0221	-.0221	-.0221	-.0229	-.0236	-.0198	-.0229	-.0242
110.000	-.0315	-.0325	-.0308	-.0289	-.0274	-.0160	-.0206	-.0176	-.0161	-.0161	-.0153	-.0161	-.0191	-.0183	-.0204
120.000						-.0036								-.0176	
130.000						-.0289								-.0178	
140.000						-.0297								-.0176	
150.000						-.0251								-.0153	
160.000						-.0191								-.0153	
170.000						-.0131								-.0131	
180.000	-.0170	-.0155	-.0135	-.0125	-.0110	-.0078	-.0078	-.0063	-.0063	-.0063	-.0070	-.0148	-.0153	-.0125	-.0140

X/L	.7290	.7470	.7870	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0375		
70.000							-.0322	-.0279	-.0269
80.000							-.0167	-.0124	-.0178
90.000	-.0231	-.0274	-.0293	-.0295	-.0301	-.0188	.0046	-.0028	-.0183
100.000	-.0178	-.0199	-.0178	-.0148	-.0082	.0041			
110.000	-.0187	-.0178	-.0178	.0004	.0233	.0174			
120.000						.0324			
130.000						.2307			
140.000						.2679			
150.000						.2228			
160.000						.1290			
170.000						.1172			
180.000	-.0151	-.0172	-.0172	-.0183	.0345	.2684			

IA35 ORBITER ASCENT CONFIGURATION (R85002)

MACH (3) = 4.000 ALPHA (5) = 2.000 RN/L = 3.4990 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0070	.1260	.1640	.2030	.2420	.2540	.2620	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI															
60.000	.1120	.0943	.0860												
70.000	.1294	.0943	.0780												
80.000	.1451	.0948	.0852												
90.000			.0852	.0398	.0109	-.0073	-.0136	-.0184	-.0236	-.0289	-.0323	-.0342	-.0362	-.0367	-.0377
100.000						-.0102	-.0112	-.0145	-.0198	-.0255	-.0303	-.0346	-.0387	-.0402	-.0412
110.000						-.0346	-.0370	-.0418	-.0471	-.0519	-.0490	-.0362	-.0302	-.0312	-.0377
120.000						.0075								-.0466	
130.000						-.0078								-.0471	
140.000						-.0327								-.0427	
150.000						-.0351								-.0327	
160.000						-.0337								-.0307	
170.000						-.0332								-.0278	
180.000						-.0303	-.0303	-.0299	-.0294	-.0284	-.0265	-.0278	-.0273	-.0268	-.0293

X/L	.4500	.4680	.4880	.5050	.5240	.5480	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0387	-.0352	-.0332	-.0332	-.0327	-.0332	-.0351	-.0366	-.0366	-.0374	-.0374	-.0374	-.0280	-.0359	-.0382
100.000	-.0402	-.0392	-.0377	-.0352	-.0332	-.0327	-.0336	-.0336	-.0344	-.0351	-.0359	-.0366	-.0359	-.0366	-.0335
110.000	-.0392	-.0392	-.0377	-.0362	-.0337	-.0253	-.0305	-.0298	-.0290	-.0305	-.0290	-.0305	-.0305	-.0305	-.0307
120.000						-.0159								-.0244	
130.000						-.0359								-.0252	
140.000						-.0366								-.0244	
150.000						-.0351								-.0237	
160.000						-.0305								-.0252	
170.000						-.0252								-.0260	
180.000	-.0288	-.0278	-.0253	-.0238	-.0228	-.0214	-.0214	-.0214	-.0214	-.0214	-.0229	-.0244	-.0298	-.0283	-.0280

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9300	.9400
PHI									
60.000							-.0435		
70.000							-.0387	-.0382	-.0387
80.000							-.0296	-.0291	-.0307
90.000	-.0328	-.0360	-.0344	-.0387	-.0387	-.0291	-.0184	-.0206	-.0280
100.000	-.0298	-.0307	-.0298	-.0280	-.0208	-.0137			
110.000	-.0259	-.0298	-.0291	-.0094	.0114	.0061			
120.000						.0061			
130.000						.1600			
140.000						.2408			
150.000						.1754			
160.000						.1057			
170.000						.1088			
180.000	-.0211	-.0227	-.0291	-.0222	.0306	.1749			

IA35 ORBITER ASCENT CONFIGURATION (R05002)

MACH (3) = 4.000 ALPHA (6) = 4.010 RN/L = 3.4990 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1840	.2090	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.1009	.0850	.0848												
70.000	.1025	.0848	.0789												
80.000	.1224	.0848	.0822												
90.000			.0836	.0410	-.0007	-.0194	-.0256	-.0309	-.0352	-.0385	-.0404	-.0414	-.0442	-.0447	-.0442
100.000						-.0083	-.0141	-.0205	-.0275	-.0337	-.0380	-.0424	-.0467	-.0482	-.0492
110.000						-.0227	-.0280	-.0347	-.0376	-.0352	-.0335	-.0392	-.0442	-.0467	-.0502
120.000						-.0031								-.0527	
130.000						-.0179								-.0507	
140.000						-.0404								-.0497	
150.000						-.0435								-.0432	
160.000						-.0428								-.0422	
170.000						-.0424								-.0397	
180.000						-.0400	-.0404	-.0404	-.0400	-.0390	-.0380	-.0392	-.0392	-.0392	-.0377

X/L	.4500	.4680	.4880	.5050	.5240	.5480	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0422	-.0402	-.0332	-.0397	-.0397	-.0402	-.0380	-.0395	-.0395	-.0410	-.0410	-.0410	-.0342	-.0403	-.0438
100.000	-.0482	-.0462	-.0427	-.0407	-.0397	-.0392	-.0365	-.0372	-.0372	-.0380	-.0380	-.0395	-.0357	-.0388	-.0400
110.000	-.0502	-.0492	-.0467	-.0442	-.0417	-.0327	-.0357	-.0357	-.0350	-.0357	-.0350	-.0350	-.0350	-.0365	-.0374
120.000						-.0216								-.0274	
130.000						-.0395								-.0282	
140.000						-.0395								-.0289	
150.000						-.0380								-.0289	
160.000						-.0357								-.0305	
170.000						-.0327								-.0335	
180.000	-.0367	-.0367	-.0367	-.0417	-.0352	-.0312	-.0305	-.0320	-.0335	-.0335	-.0335	-.0335	-.0350	-.0357	-.0358

X/L	.7290	.7470	.7670	.7850	.8090	.8290	.8620	.9000	.9400
PHI									
60.000							-.0438		
70.000							-.0400	-.0400	-.0427
80.000							-.0358	-.0384	-.0416
90.000	-.0390	-.0427	-.0438	-.0438	-.0422	-.0315	-.0304	-.0347	-.0363
100.000	-.0347	-.0363	-.0383	-.0347	-.0281	-.0245			
110.000	-.0331	-.0338	-.0358	-.0208	-.0058	-.0135			
120.000						.0178			
130.000						.0767			
140.000						.2007			
150.000						.1157			
160.000						.0659			
170.000						.0713			
180.000	-.0525	-.0342	-.0358	-.0287	.0124	.0991			

IA35 ORBITER ASCENT CONFIGURATION (R05002)

MACH (3) = 4.000 ALPHA (7) = 6.010 RN/L = 3.4990 BETA = 4.0900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0970	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0970	.0807	.0634												
70.000	.0981	.0793	.0708												
80.000	.1023	.0795	.0774												
90.000			.0793	.0418	-.0134	-.0328	-.0389	-.0432	-.0446	-.0451	-.0456	-.0461	-.0465	-.0430	-.0418
100.000						-.0206	-.0259	-.0321	-.0379	-.0422	-.0451	-.0470	-.0495	-.0500	-.0480
110.000						-.0197	-.0254	-.0297	-.0355	-.0408	-.0451	-.0485	-.0520	-.0520	-.0525
120.000						-.0052								-.0525	
130.000						-.0240								-.0520	
140.000						-.0465								-.0520	
150.000						-.0489								-.0480	
160.000						-.0494								-.0470	
170.000						-.0494								-.0455	
180.000						-.0475	-.0480	-.0475	-.0475	-.0470	-.0456	-.0450	-.0445	-.0440	-.0430

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0418	-.0421	-.0430	-.0430	-.0435	-.0450	-.0474	-.0481	-.0504	-.0504	-.0512	-.0504	-.0459	-.0474	-.0497
100.000	-.0445	-.0421	-.0421	-.0430	-.0433	-.0440	-.0451	-.0474	-.0474	-.0481	-.0489	-.0489	-.0459	-.0474	-.0485
110.000	-.0520	-.0485	-.0450	-.0430	-.0421	-.0371	-.0436	-.0443	-.0436	-.0443	-.0436	-.0445	-.0459	-.0451	-.0449
120.000						-.0276								-.0451	
130.000						-.0436								-.0360	
140.000						-.0436								-.0352	
150.000						-.0428								-.0367	
160.000						-.0428								-.0390	
170.000						-.0420								-.0428	
180.000	-.0421	-.0418	-.0406	-.0401	-.0421	-.0436	-.0436	-.0443	-.0436	-.0451	-.0451	-.0451	-.0451	-.0466	-.0438

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0465		
70.000							-.0401	-.0411	-.042?
80.000							-.0358	-.0395	-.0436
90.000	-.0449	-.0470	-.0417	-.0470	-.0449	-.0358	-.0347	-.0379	-.0406
100.000	-.0422	-.0427	-.0427	-.0406	-.0331	-.0310			
110.000	-.0408	-.0395	-.0369	-.0278	-.0171	-.0235			
120.000						.0113			
130.000						.0680			
140.000						.1461			
150.000						.0990			
160.000						.0541			
170.000						.0626			
180.000	-.0417	-.0417	-.0411	-.0358	-.0058	.0883			

IA35 ORBITER ASCENT CONFIGURATION (RQ5002)

MACH (4) = 4.7[illegible]0 ALPHA (1) = -8.000 RN/L = 3.5070 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.1811	.1402	.[illegible]99												
70.000	.2221	.1283	.1193												
80.000	.2071	.1848	.1083												
90.000			.1153	.0830	.0305	.0142	.0125	.0090	.0067	.0049	.0032	.0009	-.0024	-.0042	-.0080
100.000						-.0055	-.0154	-.0200	-.0218	-.0247	-.0229	-.0177	-.0084	-.0054	-.0024
110.000						-.0189	-.0287	-.0295	-.0316	-.0322	-.0322	-.0311	-.0295	-.0269	-.0240
120.000						.0686								-.0269	
130.000						.0566								-.0254	
140.000						.0235								-.0254	
150.000						.0049								-.0204	
160.000						.0049								-.0102	
170.000						.0049								-.0072	
180.000						.0107	.0208	.0160	.0049	-.0038	-.0084	-.0114	-.0084	-.0042	.0053

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0034	-.0048	-.0036	-.0024	-.0012	.0005	.0022	.0022	.0022	.0013	.0031	.0040	.0066	.0075	.0026
100.000	-.0030	-.0054	-.0086	-.0060	-.0084	-.0042	-.0022	-.0013	.0004	.0031	.0049	.0084	.0120	.0129	.0078
110.000	-.0234	-.0234	-.0234	-.0234	-.0096	-.0204	-.0164	-.0129	-.0087	-.0031	.0013	.0040	.0066	.0075	.0059
120.000						-.0150								.0022	
130.000						-.0129								.0084	
140.000						-.0200								.0164	
150.000						.0120								.0226	
160.000						.0226								.0288	
170.000						.0286									
180.000	.0119	.0175	.0226	.0256	.0268	.0297	.0297	.0315	.0315	.0342	.0349	.0368	.0368	.0368	.0350

X/L	.7290	.7470	.7670	.7890	.8090	.8290	.8620	.9000	.9400
PHI									
60.000							-.0051		
70.000							-.0045	.0085	.0111
80.000							.0136	.0357	.0331
90.000	.0091	.0092	.0092	.0092	.0048	.0124	.0635	.0454	.0205
100.000	.0175	.0136	.0175	.0183	.0268	.0616			
110.000	.0104	.0104	.0143	.0298	.0605	.0622			
120.000						.1205			
130.000						.3160			
140.000						.3575			
150.000						.3788			
160.000						.2358			
170.000						.1982			
180.000	.0421	.0398	.0378	.0357	.0953	.3587			

IA35 ORBITER ASCENT CONFIGURATION (R05002)

MACH (4) = 4.500 ALPHA (2) = -4.000 RN/L = 3.5070 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1840	.2030	.2420	.2840	.2820	.3010	.319%	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1301	.1217	.0999												
70.000	.1853	.1095	.1040												
80.000	.2998	.1352	.0958												
90.000			.0952	.0817	.0178	.0041	.0029	.0018	-.0006	-.0041	-.0071	-.0088	-.0118	-.0130	-.0148
100.000						-.0124	-.0176	-.0188	-.0188	-.0171	-.0100	-.0029	-.0021	-.0057	-.0099
110.000						-.0282	-.0335	-.0353	-.0370	-.0382	-.0376	-.0360	-.0342	-.0324	-.0281
120.000						.0535								-.0330	
130.000						.0406								-.0269	
140.000						.0084								-.0190	
150.000						.0094								-.0160	
160.000						.0094								-.0160	
170.000						.0094								-.0160	
180.000						.0112	.0100	.0076	.0055	.0041	-.0012	-.0093	-.0148	-.0172	-.0178

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0136	-.0130	-.0124	-.0118	-.0111	-.0099	-.0070	-.0061	-.0070	-.0070	-.0070	-.0070	-.0061	-.0053	-.0140
100.000	-.0118	-.0124	-.0130	-.0118	-.0105	-.0093	-.0081	-.0081	-.0070	-.0053	-.0053	-.0044	-.0044	-.0053	-.0080
110.000	-.0281	-.0273	-.0269	-.0257	-.0105	-.0239	-.0205	-.0196	-.0187	-.0178	-.0133	-.0106	-.0070	-.0044	-.0087
120.000						-.0208								-.0053	
130.000						-.0267								-.0088	
140.000						-.0240								-.0079	
150.000						-.0124								-.0017	
160.000						-.0044								.0046	
170.000						.0001								.0100	
180.000	-.0148	-.0118	-.0087	-.0057	-.0033	.0010	.0028	.0046	.0062	.0100	.0126	.0144	.0144	.0144	.0150

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0205		
70.000							-.0159	-.0087	-.0113
80.000							-.0048	.0078	.0084
90.000	-.0087	-.0094	-.0107	-.0113	-.0135	-.0081	.0295	.0308	.0130
100.000	.0005	-.0048	.0012	.0045	.0110	.0393			
110.000	-.0048	-.0028	-.0028	.0078	.0453	.0499			
120.000						.0479			
130.000						.2804			
140.000						.3203			
150.000						.3309			
160.000						.1676			
170.000						.1505			
180.000	.0189	.0170	.0143	.0178	.0670	.2604			

IA35 ORBITER ASCENT CONFIGURATION (RQ5002)

MACH (4) = 4.500 ALPHA (3) = -1.990 RN/L = 3.5070 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1232	.1087	.0881												
70.000	.1585	.0979	.0926												
80.000	.1992	.1155	.0875												
90.000			.0849	.0419	.0055	-.0022	-.0040	-.0052	-.0075	-.0105	-.0111	-.0134	-.0159	-.0165	-.0183
100.000						-.0128	-.0152	-.0134	-.0105	-.0081	-.0084	-.0081	-.0129	-.0147	-.0177
110.000						-.0329	-.0346	-.0376	-.0393	-.0405	-.0399	-.0378	-.0359	-.0341	-.0305
120.000						.0360								-.0341	
130.000						.0231								-.0323	
140.000						-.0040								-.0208	
150.000						-.0040								-.0129	
160.000						-.0046								-.0092	
170.000						-.0046								-.0062	
180.000						.0007	-.0005	-.0005	.0007	.0001	.0019	-.0025	-.0062	-.0062	-.0080

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6750	.6880	.7100
PHI															
90.000	-.0193	-.0183	-.0183	-.0189	-.0183	-.0171	-.0146	-.0146	-.0146	-.0155	-.0164	-.0155	-.0148	-.0128	-.0240
100.000	-.0183	-.0183	-.0185	-.0183	-.0177	-.0165	-.0146	-.0146	-.0137	-.0128	-.0128	-.0164	-.0137	-.0146	-.0201
110.000	-.0299	-.0280	-.0268	-.0256	-.0165	-.0226	-.0209	-.0200	-.0191	-.0182	-.0173	-.0155	-.0155	-.0155	-.0214
120.000						-.0195								-.0148	
130.000						-.0318								-.0155	
140.000						-.0262								-.0164	
150.000						-.0255								-.0148	
160.000						-.0209								-.0110	
170.000						-.0164								-.0085	
180.000	-.0147	-.0195	-.0201	-.0195	-.0183	-.0146	-.0128	-.0110	-.0083	-.0065	-.0056	-.0047	-.0038	-.0047	-.0044

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0286		
70.000							-.0253	-.0194	-.0214
80.000							-.0135	-.0076	-.0116
90.000	-.0182	-.0188	-.0214	-.0227	-.0234	-.0155	.0081	.0094	-.0030
100.000	-.0135	-.0188	-.0129	-.0116	-.0083	.0219			
110.000	-.0155	-.0188	-.0109	.0061	.0310	.0343			
120.000						.0428			
130.000						.2407			
140.000						.2744			
150.000						.2519			
160.000						.1293			
170.000						.1195			
180.000	-.0017	-.0050	-.0070	.0002	.0415	.2814			

IA35 ORBITER ASCENT CONFIGURATION (R85002)

MACH (4) = 4.500 ALPHA (4) = .010 RN/L = 3.5070 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2090	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1121	.0987	.0786												
70.000	.1375	.0938	.0849												
80.000	.1682	.0991	.0831												
90.000			.0772	.0535	.0088	-.0081	-.0087	-.0091	-.0120	-.0150	-.0174	-.0197	-.0224	-.0242	-.0267
100.000						-.0128	-.0128	-.0103	-.0085	-.0105	-.0138	-.0179	-.0212	-.0250	-.0281
110.000						-.0339	-.0339	-.0375	-.0410	-.0434	-.0434	-.0419	-.0401	-.0370	-.0267
120.000						.0205								-.0358	
130.000						.0081								-.0370	
140.000						-.0168								-.0309	
150.000						-.0168								-.0250	
160.000						-.0179								-.0193	
170.000						-.0179								-.0181	
180.000						-.0138	-.0150	-.0144	-.0144	-.0144	-.0132	-.0155	-.0157	-.0187	-.0187

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0273	-.0279	-.0283	-.0275	-.0267	-.0254	-.0237	-.0237	-.0246	-.0237	-.0255	-.0246	-.0237	-.0237	-.0262
100.000	-.0279	-.0285	-.0285	-.0285	-.0279	-.0273	-.0246	-.0257	-.0228	-.0228	-.0228	-.0228	-.0228	-.0237	-.0275
110.000	-.0248	-.0242	-.0250	-.0258	-.0281	-.0248	-.0228	-.0219	-.0209	-.0191	-.0173	-.0173	-.0164	-.0182	-.0223
120.000						-.0250								-.0209	
130.000						-.0291								-.0237	
140.000						-.0282								-.0237	
150.000						-.0257								-.0228	
160.000						-.0200								-.0209	
170.000						-.0155								-.0191	
180.000	-.0187	-.0187	-.0188	-.0189	-.0183	-.0137	-.0119	-.0119	-.0101	-.0128	-.0146	-.0146	-.0155	-.0173	-.0184

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
80.000							-.0341		
70.000							-.0295	-.0282	-.0289
80.000							-.0204	-.0191	-.0197
90.000	-.0256	-.0256	-.0282	-.0282	-.0289	-.0250	-.0080	-.0041	-.0139
100.000	-.0210	-.0230	-.0210	-.0204	-.0152	-.0015			
110.000	-.0204	-.0204	-.0184	-.0087	.0154	.0207			
120.000						.0102			
130.000						.1953			
140.000						.2304			
150.000						.1907			
160.000						.0923			
170.000						.0910			
180.000	-.0158	-.0178	-.0184	-.0159	.0265	.1887			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR 1A35/OA64 (LARC UPWT 1063) (R05002)

1A35 ORBITER ASCENT CONFIGURATION

MACH (4) = 4.500 ALPHA (5) = 2.000 RN/L = 3.5070 BETA = 4.0300

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1084	.0898	.0714												
70.000	.1188	.0851	.0791												
80.000	.1401	.0806	.0797												
90.000			.0750	.0354	.0054	-.0055	-.0067	-.0114	-.0173	-.0232	-.0274	-.0309	-.0328	-.0340	-.0352
100.000						-.0084	-.0067	-.0061	-.0108	-.0161	-.0208	-.0256	-.0310	-.0328	-.0364
110.000						-.0291	-.0297	-.0339	-.0398	-.0421	-.0350	-.0188	-.0194	-.0230	-.0318
120.000						.0081								-.0385	
130.000						-.0037								-.0389	
140.000						-.0256								-.0377	
150.000						-.0262								-.0322	
160.000						-.0279								-.0291	
170.000						-.0285								-.0273	
180.000						-.0244	-.0256	-.0256	-.0262	-.0262	-.0256	-.0255	-.0255	-.0255	-.0279

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0352	-.0346	-.0346	-.0340	-.0328	-.0316	-.0307	-.0307	-.0307	-.0316	-.0307	-.0307	-.0298	-.0298	-.0299
100.000	-.0370	-.0377	-.0370	-.0364	-.0352	-.0340	-.0325	-.0316	-.0307	-.0298	-.0307	-.0289	-.0298	-.0289	-.0386
110.000	-.0348	-.0364	-.0370	-.0370	-.0340	-.0352	-.0334	-.0325	-.0307	-.0289	-.0280	-.0271	-.0271	-.0289	-.0346
120.000						-.0305								-.0289	
130.000						-.0334								-.0298	
140.000						-.0307								-.0289	
150.000						-.0325								-.0234	
160.000						-.0289								-.0234	
170.000						-.0261								-.0234	
180.000	-.0279	-.0273	-.0267	-.0261	-.0255	-.0234	-.0234	-.0234	-.0216	-.0216	-.0225	-.0234	-.0243	-.0243	-.0286

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0419		
70.000							-.0406	-.0393	-.0406
80.000							-.0320	-.0346	-.0359
90.000	-.0339	-.0306	-.0306	-.0299	-.0406	-.0306	-.0260	-.0260	-.0506
100.000	-.0313	-.0326	-.0333	-.0333	-.0306	-.0193			
110.000	-.0313	-.0300	-.0288	-.0186	.0007	.0040			
120.000						.0053			
130.000						.1031			
140.000						.2010			
150.000						.1524			
160.000						.0645			
170.000						.0732			
180.000	-.0313	-.0298	-.0300	-.0253	.0048	.1324			

IA35 ORBITER ASCENT CONFIGURATION (RQ5002)

MACH (4) = 4.500 ALPHA (8) = 4.010 RN/L = 3.5070 BETA = 4.0900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0933	.0788	.0685												
70.000	.1052	.0782	.0738												
80.000	.1178	.0803	.0768												
90.000			.0752	.0395	-.0001	-.0167	-.0244	-.0291	-.0321	-.0345	-.0350	-.0362	-.0370	-.0377	-.0389
100.000						-.0067	-.0098	-.0138	-.0197	-.0256	-.0297	-.0333	-.0370	-.0383	-.0401
110.000						-.0185	-.0220	-.0321	-.0285	-.0282	-.0256	-.0303	-.0346	-.0370	-.0407
120.000						-.0013								-.0431	
130.000						-.0149								-.0413	
140.000						-.0333								-.0419	
150.000						-.0333								-.0389	
160.000						-.0356								-.0370	
170.000						-.0350								-.0358	
180.000						-.0327	-.0345	-.0345	-.0350	-.0350	-.0345	-.0340	-.0340	-.0340	-.0328

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0389	-.0389	-.0364	-.0346	-.0334	-.0334	-.0334	-.0343	-.0352	-.0361	-.0361	-.0352	-.0361	-.0361	-.0440
100.000	-.0407	-.0413	-.0407	-.0395	-.0377	-.0352	-.0334	-.0334	-.0325	-.0334	-.0334	-.0343	-.0343	-.0343	-.0407
110.000	-.0419	-.0425	-.0419	-.0407	-.0370	-.0370	-.0361	-.0343	-.0334	-.0325	-.0325	-.0325	-.0325	-.0334	-.0387
120.000						-.0352								-.0271	
130.000						-.0379								-.0298	
140.000						-.0361								-.0307	
150.000						-.0370								-.0298	
160.000						-.0352								-.0316	
170.000						-.0334								-.0334	
180.000	-.0322	-.0328	-.0334	-.0334	-.0340	-.0325	-.0325	-.0334	-.0334	-.0334	-.0343	-.0343	-.0334	-.0343	-.0367

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0433		
70.000							-.0413	-.0612	-.0400
80.000							-.0347	-.0347	-.0393
90.000	-.0387	-.0413	-.0435	-.0433	-.0420	-.0347	-.0307	-.0340	-.0367
100.000	-.0360	-.0373	-.0380	-.0353	-.0287	-.0201			
110.000	-.0340	-.0347	-.0320	-.0247	-.0148	-.0174			
120.000						.0178			
130.000						.0324			
140.000						.1645			
150.000						.0915			
160.000						.0443			
170.000						.0516			
180.000	-.0353	-.0353	-.0347	-.0274	-.0141	.0649			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063)

(R05002)

IA35 ORBITER ASCENT CONFIGURATION

MACH (4) = 4.500 ALPHA (7) = 6.010 RN/L = 3.5070 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.0882	.0738	.0997												
70.000	.0897	.0897	.0897												
80.000	.0982	.0897	.0744												
90.000			.0727	.0408	-.0051	-.0210	-.0275	-.0317	-.0340	-.0370	-.0367	-.0399	-.0420	-.0420	-.0420
100.000						-.0157	-.0222	-.0287	-.0322	-.0352	-.0370	-.0387	-.0414	-.0420	-.0432
110.000						-.0140	-.0187	-.0216	-.0258	-.0305	-.0346	-.0377	-.0408	-.0420	-.0438
120.000						-.0040								-.0444	
130.000						-.0187								-.0438	
140.000						-.0370								-.0438	
150.000						-.0370								-.0420	
160.000						-.0405								-.0414	
170.000						-.0405								-.0402	
180.000						-.0391	-.0393	-.0399	-.0399	-.0405	-.0395	-.0389	-.0389	-.0383	-.0377

X/L	.4500	.4680	.4980	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6920	.7100
PHI															
90.000	-.0398	-.0383	-.0371	-.0377	-.0383	-.0389	-.0390	-.0390	-.0408	-.0408	-.0408	-.0408	-.0399	-.0408	-.0481
100.000	-.0426	-.0402	-.0383	-.0365	-.0365	-.0377	-.0363	-.0372	-.0390	-.0399	-.0408	-.0408	-.0408	-.0399	-.0448
110.000	-.0450	-.0450	-.0420	-.0402	-.0365	-.0365	-.0354	-.0354	-.0354	-.0363	-.0372	-.0372	-.0381	-.0381	-.0428
120.000						-.0365								-.0309	
130.000						-.0372								-.0300	
140.000						-.0363								-.0318	
150.000						-.0381								-.0327	
160.000						-.0372								-.0354	
170.000						-.0372								-.0381	
180.000	-.0377	-.0377	-.0371	-.0377	-.0383	-.0381	-.0390	-.0390	-.0399	-.0408	-.0408	-.0408	-.0408	-.0408	-.0428

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0448		
70.000							-.0388	-.0381	-.0388
80.000							-.0328	-.0388	-.0395
90.000	-.0428	-.0414	-.0448	-.0434	-.0421	-.0348	-.0315	-.0348	-.0434
100.000	-.0421	-.0421	-.0414	-.0388	-.0348	-.0302			
110.000	-.0388	-.0388	-.0388	-.0289	-.0216	-.0256			
120.000						.0082			
130.000						.0379			
140.000						.1127			
150.000						.0616			
160.000						.0154			
170.000						.0154			
180.000	-.0414	-.0428	-.0421	-.0408	-.0362	-.0024			

IA35 ORBITER ASCENT CONFIGURATION (R05003) (03 JAN 74)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 IN.
LREF = .0000 IN. YMRP = .0000 IN.
BREF = .0000 IN. ZMRP = .0000 IN.
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = 2.000 ELEVON = .000

MACH (1) = 4.500 ALPHA (1) = -6.000 RN/L = 3.5059 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1992	.1744	.1450												
70.000	.2625	.1603	.1497												
80.000	.3244	.2009	.1458												
90.000			.1832	.0902	.0502	.0278	.0243	.0231	.0184	.0137	.0095	.0068	.0056	.0024	.0008
100.000						.0119	.0078	.0078	.0113	.0148	.0196	.0178	.0121	.0084	.0024
110.000						-.0111	-.0164	-.0193	-.0234	-.0258	-.0270	-.0241	-.0223	-.0205	-.0157
120.000						.0932								-.0193	
130.000						.0714								-.0217	
140.000						.0219								-.0247	
150.000						.0025								-.0235	
160.000						.0048								-.0169	
170.000						.0060								-.0084	
180.000						.0060	.0172	.0143	.0051	-.0058	-.0111	-.0127	-.0103	-.0072	.0006

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0018	.0024	.0048	.0072	.0102	.0139	.0142	.0142	.0114	.0096	.0078	.0078	.0087	.0087	.0040
100.000	.0008	.0000	.0000	.0024	.0042	.0080	.0060	.0078	.0096	.0087	.0087	.0087	.0105	.0114	.0093
110.000	-.0145	-.0145	-.0139	-.0139	.0036	-.0133	-.0120	-.0084	-.0021	.0051	.0114	.0169	.0196	.0187	.0191
120.000						-.0127								.0169	
130.000						-.0066								.0124	
140.000						-.0093								.0178	
150.000						.0142								.0196	
160.000						.0195								.0214	
170.000						.0259								.0252	
180.000	.0121	.0187	.0241	.0277	.0289	.0304	.0295	.0295	.0295	.0286	.0286	.0268	.0268	.0268	.0289

X/L	.7290	.7470	.7670	.7850	.8030	.8230	.8620	.9000	.9400
PHI									
80.000							-.0051		
70.000							.0014	.0099	.0054
80.000							.0171	.0184	.0237
90.000	.0093	.0080	.0034	.0027	.0014	.0093	.0322	.0318	.0394
100.000	.0185	.0139	.0158	.0158	.0191	.0525			
110.000	.0243	.0217	.0250	.0341	.0780	.1094			
120.000						.0983			

IA35 ORBITER ASCENT CONFIGURATION (R05003)

MACH (1) = 4.500 ALPHA (1) = -6.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
130.000						.3913			
140.000						.3583			
150.000						.3078			
160.000						.2553			
170.000						.2226			
180.000	.0355	.0341	.0322	.0322	.0804	.4403			

MACH (1) = 4.500 ALPHA (2) = -4.000 RN/L = 3.5059 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1790	.1536	.1218												
70.000	.2274	.1418	.1306												
80.000	.2781	.1725	.1306												
90.000			.1353	.0781	.0345	.0174	.0138	.0103	.0061	.0032	-.0003	-.0015	-.0037	-.0043	-.0050
100.000						.0085	.0061	.0067	.0079	.0079	.0073	.0032	-.0019	-.0043	-.0068
110.000						-.0157	-.0186	-.0228	-.0263	-.0259	-.0292	-.0268	-.0256	-.0250	-.0214
120.000						.0728								-.0244	
130.000						.0569								-.0252	
140.000						.0150								-.0171	
150.000						.0097								-.0159	
160.000						.0120								-.0159	
170.000						.0091								-.0153	
180.000						.0079	.0091	.0079	.0038	.0038	.0002	-.0080	-.0135	-.0153	-.0165

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6750	.6880	.7100
PHI															
90.000	-.0043	-.0031	-.0007	.0017	.0042	.0048	.0072	.0053	.0035	.0026	.0017	.0008	-.0001	-.0001	-.0107
100.000	-.0074	-.0065	-.0050	-.0031	-.0013	.0011	.0044	.0063	.0053	.0044	.0026	-.0001	-.0010	-.0019	-.0100
110.000	-.0201	-.0189	-.0171	-.0155	-.0007	-.0116	-.0082	-.0073	-.0028	-.0001	.0008	.0026	.0026	.0017	-.0047
120.000						-.0128								.0072	
130.000						-.0199								.0026	
140.000						-.0154								.0017	
150.000						-.0091								.0035	
160.000						-.0046								.0044	
170.000						-.0001								.0063	
180.000	-.0141	-.0104	-.0088	-.0031	-.0007	.0026	.0044	.0044	.0063	.0072	.0081	.0090	.0099	.0108	.0088

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									

IA35 ORBITER ASCENT CONFIGURATION (R05003)

MACH (1) = 4.500 ALPHA (2) = -4.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0194		
70.000							-.0147	-.0094	-.0140
80.000							.0019	-.0001	-.0061
90.000	-.0081	-.0100	-.0134	-.0154	-.0167	-.0017	.0112	.0139	.0179
100.000	-.0034	-.0087	-.0067	-.0061	-.0021	.0272			
110.000	.0019	-.0007	.0013	.0132	.0518	.0950			
120.000						.1276			
130.000						.2899			
140.000						.3081			
150.000						.2673			
160.000						.2127			
170.000						.1981			
180.000	.0139	.0148	.0139	.0148	.0884	.3396			

MACH (1) = 4.500 ALPHA (3) = -2.000 RN/L = 3.5059 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2050	.2420	.2640	.2820	.3010	.3190	.3390	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1980	.1312	.1047												
70.000	.1955	.1235	.1112												
80.000	.2543	.1477	.1147												
90.000			.1259	.0834	.0256	.0087	.0056	.0038	.0020	-.0003	-.0027	-.0045	-.0063	-.0081	-.0099
100.000						.0044	.0026	.0032	.0020	.0002	-.0021	-.0045	-.0081	-.0093	-.0123
110.000						-.0192	-.0204	-.0245	-.0287	-.0322	-.0334	-.0311	-.0305	-.0293	-.0202
120.000						.0539								-.0263	
130.000						.0386								-.0263	
140.000						.0008								-.0208	
150.000						.0008								-.0111	
160.000						-.0021								-.0075	
170.000						-.0021								-.0051	
180.000						-.0021	-.0009	.0008	.0020	.0026	.0032	-.0002	-.0039	-.0039	-.0083

X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0093	-.0087	-.0051	-.0033	-.0026	-.0026	-.0028	-.0037	-.0064	-.0073	-.0073	-.0082	-.0082	-.0091	-.0194
100.000	-.0123	-.0123	-.0111	-.0093	-.0089	-.0045	-.0028	-.0028	-.0037	-.0046	-.0073	-.0082	-.0082	-.0100	-.0200
110.000	-.0188	-.0123	-.0103	-.0093	-.0057	-.0081	-.0055	-.0019	-.0001	-.0019	-.0019	-.0037	-.0055	-.0092	-.0180
120.000						-.0075								-.0084	
130.000						-.0218								-.0073	
140.000						-.0172								-.0091	
150.000						-.0236								-.0091	

IA35 ORBITER ASCENT CONFIGURATION (R05003)

MACH (1) = 4.500 ALPHA (3) = -2.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
180.000						-.0209								-.0091	
170.000						-.0163								-.0073	
160.000	-.0111	-.0168	-.0184	-.0178	-.0166	-.0154	-.0145	-.0127	-.0118	-.0100	-.0073	-.0064	-.0037	-.0037	-.0094

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0280		
70.000							-.0233	-.0200	-.0220
60.000							-.0087	-.0114	-.0180
50.000	-.0147	-.0187	-.0213	-.0233	-.0247	-.0134	.0013	-.0114	-.0054
100.000	-.0147	-.0180	-.0167	-.0174	-.0140	.0079			
110.000	-.0127	-.0154	-.0140	-.0047	.0232	.0518			
120.000						.1382			
130.000						.2233			
140.000						.2446			
150.000						.2114			
160.000						.1529			
170.000						.1535			
180.000	-.0007	-.0014	-.0027	.0039	.0864	.1967			

MACH (1) = 4.500 ALPHA (4) = .000 RN/L = 3.5059 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1423	.1172	.1051												
70.000	.1699	.1120	.1037												
80.000	.1988	.1278	.1055												
90.000			.1084	.0586	.0173	.0081	.0075	.0046	-.0007	-.0054	-.0101	-.0125	-.0146	-.0158	-.0148
100.000						.0034	.0034	.0048	.0004	-.0013	-.0060	-.0107	-.0140	-.0164	-.0194
110.000						-.0177	-.0183	-.0218	-.0271	-.0318	-.0301	-.0164	-.0082	-.0068	-.0134
120.000						.0380								-.0284	
130.000						.0233								-.0224	
140.000						-.0095								-.0286	
150.000						-.0095								-.0200	
160.000						-.0136								-.0148	
170.000						-.0136								-.0122	
180.000						-.0136	-.0125	-.0130	-.0107	-.0101	-.0101	-.0104	-.0104	-.0128	-.0148

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															

IA35 ORBITER ASCENT CONFIGURATION (R05003)

MACH (1) = 4.500 ALPHA (4) = .000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6830	.7100
PHI															
80.000	-.0128	-.0104	-.0086	-.0086	-.0098	-.0110	-.0114	-.0141	-.0150	-.0168	-.0168	-.0177	-.0177	-.0177	-.0237
100.000	-.0188	-.0176	-.0146	-.0134	-.0116	-.0110	-.0105	-.0114	-.0132	-.0141	-.0159	-.0168	-.0168	-.0177	-.0237
110.000	-.0170	-.0182	-.0176	-.0164	-.0104	-.0134	-.0114	-.0114	-.0114	-.0123	-.0132	-.0132	-.0150	-.0159	-.0224
120.000						-.0080								-.0078	
130.000						-.0195								-.0114	
140.000						-.0177								-.0141	
150.000						-.0195								-.0168	
160.000						-.0159								-.0168	
170.000						-.0141								-.0159	
180.000	-.0148	-.0140	-.0134	-.0128	-.0134	-.0123	-.0132	-.0123	-.0114	-.0132	-.0141	-.0141	-.0132	-.0132	-.0127

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0302		
70.000							-.0263	-.0256	-.0257
80.000							-.0185	-.0205	-.0231
90.000	-.0205	-.0237	-.0257	-.0270	-.0270	-.0179	-.0081	-.0146	-.0148
100.000	-.0185	-.0205	-.0205	-.0211	-.0159	.0010			
110.000	-.0185	-.0192	-.0179	-.0120	.0101	.0160			
120.000						.1363			
130.000						.1656			
140.000						.1805			
150.000						.1695			
160.000						.1142			
170.000						.1220			
180.000	-.0075	-.0068	-.0140	-.0095	.0394	.1526			

MACH (1) = 4.500 ALPHA (5) = 2.000 RN/L = 3.5059 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1347	.1125	.1125												
70.000	.1511	.1064	.1064												
80.000	.1669	.1142	.1101												
90.000			.1060	.0739	.0318	.0119	.0031	-.0039	-.0092	-.0144	-.0179	-.0203	-.0223	-.0229	-.0223
100.000						.0125	.0119	.0072	-.0010	-.0086	-.0133	-.0185	-.0229	-.0241	-.0259
110.000						-.0068	-.0074	-.0132	-.0162	-.0103	-.0056	-.0121	-.0193	-.0223	-.0271
120.000						.0259								-.0344	
130.000						.0107								-.0314	
140.000						-.0173								-.0314	
150.000						-.0173								-.0283	

IA35 ORBITER ASCENT CONFIGURATION (R05003)

MACH (1) = 4.900 ALPHA (5) = 2.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
180.000						-.0226								-.0241	
170.000						-.0226								-.0223	
180.000						-.0220	-.0214	-.0208	-.0208	-.0208	-.0203	-.0217	-.0217	-.0223	-.0223
X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0203	-.0193	-.0187	-.0193	-.0199	-.0217	-.0206	-.0215	-.0233	-.0233	-.0233	-.0242	-.0253	-.0242	-.0359
100.000	-.0239	-.0247	-.0223	-.0199	-.0193	-.0199	-.0189	-.0206	-.0215	-.0224	-.0233	-.0251	-.0242	-.0251	-.0326
110.000	-.0283	-.0289	-.0277	-.0253	-.0193	-.0223	-.0206	-.0206	-.0206	-.0215	-.0224	-.0224	-.0233	-.0242	-.0313
120.000						-.0211								-.0180	
130.000						-.0251								-.0153	
140.000						-.0233								-.0171	
150.000						-.0260								-.0162	
160.000						-.0233								-.0144	
170.000						-.0224								-.0135	
180.000	-.0241	-.0247	-.0241	-.0235	-.0229	-.0206	-.0206	-.0189	-.0180	-.0162	-.0144	-.0135	-.0126	-.0135	-.0162
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400						
PHI															
60.000							-.0359								
70.000							-.0300	-.0280	-.0313						
80.000							-.0254	-.0267	-.0293						
90.000	-.0287	-.0326	-.0352	-.0359	-.0365	-.0267	-.0208	-.0228	-.0241						
100.000	-.0267	-.0293	-.0306	-.0300	-.0241	-.0103									
110.000	-.0274	-.0280	-.0293	-.0195	.0014	.0040									
120.000						.0806									
130.000						.1860									
140.000						.1192									
150.000						.1487									
160.000						.0806									
170.000						.0950									
180.000	-.0130	-.0143	-.0162	-.0130	.0178	.1114									

IA35 ORBITER ASCENT CONFIGURATION (RQ5003)

MACH (1) = 4.500 ALPHA (8) = 4.000 RN/L = 3.5059 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1280	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1212	.1077	.0960												
70.000	.1323	.1013	.0972												
80.000	.1423	.1050	.1024												
90.000			.1042	.0861	.0157	-.0043	-.0131	-.0195	-.0225	-.0248	-.0260	-.0266	-.0277	-.0277	-.0217
100.000						.0086	.0033	-.0031	-.0115	-.0184	-.0219	-.0254	-.0289	-.0301	-.0307
110.000						.0016	-.0025	-.0060	-.0084	-.0148	-.[illegible]01	-.0241	-.0289	-.0307	-.0331
120.000						.0162								-.0360	
130.000						-.0002								-.0367	
140.000						-.0254								-.0367	
150.000						-.0313								-.0355	
160.000						-.0307								-.0325	
170.000						-.0307								-.0313	
180.000						-.0301	-.0301	-.0301	-.0301	-.0295	-.0301	-.0307	-.0307	-.0307	-.0307

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0205	-.0217	-.0235	-.0247	-.0247	-.0253	-.0257	-.0275	-.0284	-.0293	-.0302	-.0311	-.0311	-.0320	-.0391
100.000	-.0277	-.0247	-.0255	-.0241	-.0247	-.0259	-.0266	-.0275	-.0284	-.0293	-.0302	-.0311	-.0320	-.0320	-.0365
110.000	-.0331	-.0313	-.0295	-.0277	-.0241	-.0259	-.0266	-.0284	-.0293	-.0293	-.0311	-.0311	-.0320	-.0329	-.0371
120.000						-.0247								-.0275	
130.000						-.0311								-.0259	
140.000						-.0275								-.0221	
150.000						-.0329								-.0221	
160.000						-.0320								-.0212	
170.000						-.0311								-.0221	
180.000	-.0301	-.0295	-.0295	-.0301	-.0295	-.0284	-.0275	-.0275	-.0257	-.0248	-.0230	-.0230	-.0221	-.0221	-.0221

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0430		
70.000							-.0358	-.0319	-.0319
80.000							-.0280	-.0280	-.0326
90.000	-.0339	-.0358	-.0378	-.0378	-.0365	-.0293	-.0253	-.0267	-.0293
100.000	-.0319	-.0345	-.0345	-.0326	-.0280	-.0208			
110.000	-.0319	-.0326	-.0299	-.0227	-.0077	-.0096			
120.000						.0631			
130.000						.1240			
140.000						.0690			
150.000						.1057			
160.000						.0729			
170.000						.0729			
180.000	-.0188	-.0201	-.0201	-.0181	.0048	.1201			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063) (RQ5003)

IA35 ORBITER ASCENT CONFIGURATION

MACH (1) = 4.500 ALPHA (7) = 6.000 RN/L = 3.5059 BETA = 1.9900

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1073	.0986	.0723												
70.000	.1128	.0901	.0806												
80.000	.1168	.0889	.0871												
90.000			.0913	.0951	.0024	-.0154	-.0231	-.0285	-.0314	-.0332	-.0320	-.0291	-.0260	-.0260	-.0272
100.000						-.0089	-.0142	-.0196	-.0255	-.0302	-.0332	-.0350	-.0327	-.0309	-.3278
110.000						-.0089	-.0136	-.0160	-.0202	-.0261	-.0308	-.0339	-.0370	-.0370	-.0352
120.000						.0071								-.0431	
130.000						-.0107								-.0443	
140.000						-.0338								-.0437	
150.000						-.0385								-.0431	
160.000						-.0391								-.0419	
170.000						-.0403								-.0406	
180.000						-.0397	-.0409	-.0397	-.0403	-.0403	-.0403	-.0400	-.0406	-.0406	-.0400

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0278	-.0297	-.0309	-.0315	-.0333	-.0345	-.0352	-.0379	-.0388	-.0397	-.0415	-.0415	-.0415	-.0424	-.0513
100.000	-.0278	-.0290	-.0305	-.0315	-.0327	-.0345	-.0361	-.0379	-.0397	-.0415	-.0415	-.0433	-.0433	-.0442	-.0480
110.000	-.0321	-.0290	-.0290	-.0309	-.0327	-.0352	-.0361	-.0375	-.0397	-.0415	-.0415	-.0424	-.0433	-.0442	-.0480
120.000						-.0339								-.0415	
130.000						-.0379								-.0315	
140.000						-.0352								-.0279	
150.000						-.0370								-.0279	
160.000						-.0361								-.0279	
170.000						-.0361								-.0297	
180.000	-.0388	-.0382	-.0370	-.0370	-.0358	-.0352	-.0343	-.0352	-.0334	-.0334	-.0325	-.0325	-.0325	-.0325	-.0320

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0466		
70.000							-.0420	-.0360	-.0340
80.000							-.0353	-.0327	-.0353
90.000	-.0448	-.0466	-.0473	-.0475	-.0453	-.0380	-.0300	-.0300	-.0307
100.000	-.0468	-.0453	-.0448	-.0426	-.0380	-.0310			
110.000	-.0440	-.0440	-.0420	-.0373	-.0274	-.0260			
120.000						.0238			
130.000						.1022			
140.000						.0363			
150.000						.0590			
160.000						.0510			
170.000						.0530			
180.000	-.0300	-.0307	-.0307	-.0267	-.0054	.1248			

IA35 ORBITER ASCENT CONFIGURATION (RQ5004) (05 JAN 74)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 IN.
LREF = .0000 IN. YMRP = .0000 IN.
BREF = .0000 IN. ZMRP = .0000 IN.
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000

MACH (1) = 2.500 ALPHA (1) = -6.010 RN/L = 2.5011 BETA = -.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2090	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.3071	.2503	.2015												
70.000	.2962	.2854	.1971												
80.000	.3443	.2858	.2113												
90.000			.2317	.1696	.1288	.0915	.0756	.0525	.0356	.0185	.0094	.0003	-.0066	-.0085	-.0133
100.000						.0676	.0698	.0711	.0445	.0212	.0067	-.0052	-.0124	-.0153	-.0133
110.000						-.0469	-.0297	-.0569	.0085	.0419	.0175	.0031	-.0027	-.0066	-.0047
120.000						.0605								.0127	
130.000						.0194								.0166	
140.000						-.0333								.0069	
150.000						-.0260								.0079	
160.000						-.0206								.0224	
170.000						-.0215								.0347	
180.000						-.0197	-.0088	.0012	.0230	.0356	.0365	.0390	.0381	.0390	.0320

X/L	.4900	.4680	.4860	.5090	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0133	-.0133	-.0095	-.0095	-.0066	-.0047	-.0061	-.0052	-.0033	.0048	.0248	.0401	.0463	.0534	-.0487
100.000	-.0114	-.0085	-.0056	-.0075	-.0027	-.0018	.0003	.0005	.0021	.0012	.0048	.0275	.0436	.0454	-.0493
110.000	-.0018	.0011	.0040	.0050	.0031	-.0375	.0057	.0048	.0057	.0057	.0048	.0030	.0248	.0130	-.0556
120.000						-.0539								.0121	
130.000						.0284								.0185	
140.000						.0356								.0294	
150.000						.0392								.0374	
160.000						.0418								.0401	
170.000						.0418								.0418	
180.000	.0282	.0224	.0253	.0272	.0338	.0427	.0463	.0498	.0507	.0498	.0392	.0454	.0383	.0401	-.0552

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8610	.9000	.9400
PHI									
80.000							.0253		
70.000							.0253	.0342	.0342
80.000							.0401	.0342	.0342
90.000	-.0522	-.0628	-.0640	-.0658	-.0469	.0253	.0342	.0342	.0354
100.000	-.0434	-.0593	-.0575	-.0489	-.0087	.0253			
110.000	-.0528	-.0484	-.0434	-.0040	.0253	.0253			
120.000						.0253			

IA35 ORBITER ASCENT CONFIGURATION (R05004)

MACH (1) = 2.500 ALPHA (1) = -8.010

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
130.000						.0253			
140.000						.0253			
150.000						.0253			
160.000						.0253			
170.000						.0253			
180.000	-.0348	-.0358	-.0375	-.0381	.0253	.0253			

MACH (1) = 2.500 ALPHA (2) = -3.990 RN/L = 2.5011 BETA = -.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.2908	.2215	.1914												
70.000	.2782	.2215	.1798												
80.000	.3065	.2605	.1869												
90.000			.2100	.1462	.1356	.0753	.0576	.0399	.0228	.0082	-.0036	-.0100	-.0185	-.0214	-.0311
100.000						.0824	.0727	.0523	.0292	.0073	-.0064	-.0182	-.0262	-.0311	-.0330
110.000						-.0182	-.0100	-.0118	.0390	.0173	-.0045	-.0175	-.0253	-.0272	-.0253
120.000						.0443								-.0059	
130.000						.0009								.0009	
140.000						-.0537								-.0040	
150.000						-.0464								-.0098	
160.000						-.0428								-.0030	
170.000						-.0437								.0076	
180.000						-.0410	-.0300	-.0191	-.0045	.0082	.0137	.0134	.0125	.0115	.0038

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0330	-.0330	-.0330	-.0301	-.0272	-.0282	-.0268	-.0277	-.0277	-.0222	-.0103	.0071	.0236	.0246	.0191
100.000	-.0321	-.0311	-.0301	-.0272	-.0262	-.0253	-.0241	-.0231	-.0222	-.0231	-.0112	-.0149	.0236	.0126	.0191
110.000	-.0253	-.0195	-.0185	-.0185	-.0185	-.0292	-.0158	-.0158	-.0158	-.0158	-.0167	-.0167	-.0075	-.0094	.0054
120.000						-.0311								-.0057	
130.000						.0099								.0016	
140.000						.0154								.0090	
150.000						.0209								.0163	
160.000						.0246								.0200	
170.000						.0291								.0209	
180.000	.0018	-.0001	.0087	.0144	.0222	.0301	.0310	.0310	.0310	.0310	.0310	.0236	.0163	.0209	.0184

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

IA35 ORBITER ASCENT CONFIGURATION (R05004)

MACH (1) = 2.500 ALPHA (2) = -3.990

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							.0372		
70.000							.0416	.0398	.0246
80.000							.0548	.0486	.0257
90.000	.0127	.0008	-.0019	-.0019	.0150	.0671	.0671	.0557	.0246
100.000	.0282	.0184	.0200	.0191	.0794	.0979			
110.000	.0182	.0284	.0291	.0821	.1375	.0970			
120.000						.1894			
130.000						.3742			
140.000						.3478			
150.000						.3302			
160.000						.3168			
170.000						.3038			
180.000	.0255	.0173	.0127	.0154	.2317	.4077			

MACH (1) = 2.500 ALPHA (3) = -2.000 RN/L = 2.5011 BETA = -.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2733	.2028	.2107												
70.000	.2585	.2028	.1700												
80.000	.2717	.2364	.1892												
90.000			.1913	.1515	.1170	.0551	.0392	.0230	.0112	-.0042	-.0151	-.0235	-.0335	-.0362	-.0458
100.000						.0763	.0542	.0347	.0067	-.0042	-.0188	-.0306	-.0410	-.0449	-.0497
110.000						.0148	.0239	.0239	.0139	-.0106	-.0260	-.0362	-.0449	-.0458	-.0488
120.000						.0212								-.0286	
130.000						-.0142								-.0198	
140.000						-.0696								-.0150	
150.000						-.0651								-.0227	
160.000						-.0624								-.0218	
170.000						-.0624								-.0150	
180.000						-.0605	-.0524	-.0406	-.0260	-.0151	-.0097	-.0095	-.0112	-.0112	-.0170

X/L	.4500	.4680	.4860	.5030	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6860	.7100
PHI															
90.000	-.0487	-.0506	-.0506	-.0497	-.0487	-.0497	-.0498	-.0496	-.0487	-.0459	-.0367	-.0230	.0000	-.0055	-.0058
100.000	-.0497	-.0506	-.0497	-.0477	-.0468	-.0449	-.0441	-.0441	-.0441	-.0441	-.0358	-.0358	-.0110	-.0129	-.0049
110.000	-.0458	-.0429	-.0420	-.0410	-.0410	-.0391	-.0377	-.0377	-.0367	-.0367	-.0367	-.0367	-.0221	-.0312	-.0175
120.000						-.0333								-.0221	
130.000						-.0101								-.0175	
140.000						-.0045								-.0092	
150.000						.0009								-.0046	

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

MACH (1) = 2.500 ALPHA (3) = -2.000

SECTION (1)FUSELA DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI														.0000	
160.000						.0055								.0018	
170.000						.0110									
180.000	-.0170	-.0131	-.0025	.0071	.0100	.0128	.0147	.0137	.0110	.0101	.0091	.0009	.0036	.0000	-.0013

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							.0213		
60.000							.0177	.0150	.0023
70.000							.0267	.0195	.0023
80.000							.0330	.0240	.0077
90.000	-.0157	-.0175	-.0211	-.0193	-.0031	.0427			
100.000	.0014	-.0067	-.0040	.0032	.0506	.0638			
110.000	-.0058	.0032	.0068	.0629	.1060	.0620			
120.000						.2028			
130.000						.3436			
140.000						.3057			
150.000						.2802			
160.000						.2749			
170.000						.2697			
180.000	.0068	-.0040	-.0058	-.0013	.1914	.3409			

MACH (1) = 2.500 ALPHA (4) = .000 RN/L = 2.5011 BETA = -.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2570	.1844	.2216												
90.000	.2393	.1844	.1818												
100.000	.2446	.2207	.1729												
110.000			.1774	.1809	.1022	.0384	.0232	.0086	-.0041	-.0168	-.0268	-.0350	-.0450	-.0499	-.0595
120.000						.0544	.0358	.0186	-.0005	-.0186	-.0305	-.0423	-.0518	-.0557	-.0634
130.000						.0473	.0304	.0150	-.0014	-.0277	-.0395	-.0499	-.0586	-.0615	-.0643
140.000						.0232								-.0499	
150.000						-.0268								-.0412	
160.000						-.0832								-.0334	
170.000						-.0813								-.0315	
180.000						-.0768								-.0315	
						-.0795								-.0305	
						-.0777	-.0695	-.0604	-.0468	-.0359	-.0305	-.0296	-.0276	-.0276	-.0286

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

MACH (1) = 2.500 ALPHA (4) = .000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0834	-.0872	-.0872	-.0882	-.0882	-.0853	-.0868	-.0857	-.0857	-.0811	-.0519	-.0382	-.0245	-.0236	-.0247
100.000	-.0883	-.0882	-.0882	-.0872	-.0853	-.0843	-.0620	-.0611	-.0602	-.0384	-.0365	-.0474	-.0236	-.0281	-.0201
110.000	-.0853	-.0843	-.0834	-.0815	-.0615	-.0547	-.0574	-.0365	-.0547	-.0547	-.0365	-.0519	-.0318	-.0419	-.0330
120.000						-.0479								-.0373	
130.000						-.0291								-.0338	
140.000						-.0217								-.0263	
150.000						-.0153								-.0208	
160.000						-.0080								-.0181	
170.000						-.0053								-.0153	
180.000	-.0247	-.0180	-.0103	-.0054	-.0054	-.0025	-.0034	-.0034	-.0062	-.0071	-.0190	-.0245	-.0135	-.0163	-.0192

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
90.000							.0019		
70.000							.0047	-.0026	-.0173
80.000							.0102	-.0008	-.0155
90.000	-.0285	-.0330	-.0348	-.0339	-.0109	.0221	.0157	.0130	-.0091
100.000	-.0173	-.0210	-.0192	-.0118	.0304	.0428			
110.000	-.0173	-.0118	-.0082	.0445	.0805	.0249			
120.000						.1990			
130.000						.3306			
140.000						.2622			
150.000						.2332			
160.000						.2367			
170.000						.2358			
180.000	-.0091	-.0184	-.0219	-.0173	.1560	.2929			

MACH (1) = 2.500 ALPHA (5) = 2.000 RN/L = 2.5011 BETA = -.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1540	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2383	.1551	.2127												
70.000	.2253	.1755	.2127												
80.000	.2206	.1967	.1879												
90.000			.1826	.1737	.0746	.0185	-.0010	-.0120	-.0239	-.0340	-.0415	-.0496	-.0600	-.0649	-.0747
100.000						.0347	.0009	.0027	-.0168	-.0340	-.0441	-.0551	-.0659	-.0718	-.0796
110.000						.0374	.0192	.0009	-.0156	-.0385	-.0542	-.0649	-.0747	-.0777	-.0835
120.000						.0542								-.0777	
130.000						-.0395								-.0669	
140.000						-.0973								-.0571	
150.000						-.0973								-.0493	

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063)

IA35 ORBITER ASCENT CONFIGURATION (R05004)

MACH (1) = 2.500 ALPHA (5) = 2.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CF

X/L	.0870	.1280	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI														-.0424	
160.000						-.0927								-.0385	
170.000						-.0946								-.0385	-.0346
180.000						-.0927	-.0883	-.0790	-.0661	-.0542	-.0468	-.0453	-.0414		

X/L	.6500	.6680	.6860	.7050	.7240	.7460	.7610	.7800	.7980	.8170	.8360	.8540	.8730	.8880	.9100
PHI															
90.000	-.0768	-.0818	-.0845	-.0845	-.0845	-.0845	-.0817	-.0826	-.0799	-.0716	-.0560	-.0423	-.0377	-.0322	-.0331
100.000	-.0845	-.0865	-.0875	-.0865	-.0845	-.0816	-.0799	-.0771	-.0762	-.0735	-.0551	-.0524	-.0377	-.0303	-.0275
110.000	-.0845	-.0855	-.0855	-.0845	-.0808	-.0718	-.0753	-.0725	-.0698	-.0689	-.0661	-.0588	-.0377	-.0413	-.0303
120.000						-.0849								-.0524	
130.000						-.0487								-.0487	
140.000						-.0395								-.0402	
150.000						-.0322								-.0386	
160.000						-.0267								-.0349	
170.000						-.0221								-.0322	
180.000	-.0318	-.0297	-.0257	-.0258	-.0228	-.0221	-.0221	-.0230	-.0248	-.0248	-.0257	-.0404	-.0322	-.0331	-.0359

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.0173		
80.000							-.0163	-.0191	-.0322
70.000							-.0032	-.0191	-.0340
80.000							-.0210	-.0061	-.0266
90.000	-.0349	-.0424	-.0452	-.0396	-.0154	.0116			
100.000	-.0247	-.0303	-.0303	-.0163	.0228	.0302			
110.000	-.0247	-.0238	-.0163	.0364	.0679	.0391			
120.000						.1596			
130.000						.3177			
140.000						.2234			
150.000						.1963			
160.000						.2042			
170.000						.2068			
180.000	-.0275	-.0377	-.0396	-.0340	.1317	.2767			

IA35 ORBITER ASCENT CONFIGURATION (RB5004)

MACH (1) = 2.500 ALPHA (6) = 3.990 RN/L = 2.1011 BETA = -.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1840	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2138	.1534	.1888												
70.000	.2091	.1490	.1897												
80.000	.2047	.1711	.1826												
90.000			.1870	.1552	.0508	-.0034	-.0162	-.0272	-.0364	-.0464	-.0538	-.0620	-.0719	-.0758	-.0845
100.000						.0167	.0002	-.0117	-.0281	-.0437	-.0547	-.0657	-.0758	-.0816	-.0884
110.000						.0240	.0066	-.0098	-.0281	-.0501	-.0647	-.0748	-.0845	-.0874	-.0952
120.000						.0482								-.1001	
130.000						-.0364								-.0845	
140.000						-.1068								-.0738	
150.000						-.1096								-.0641	
160.000						-.1041								-.0553	
170.000						-.1068								-.0475	
180.000						-.1059	-.0986	-.0895	-.0776	-.0647	-.0574	-.0514	-.0475	-.0456	-.0437

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0894	-.0933	-.0943	-.0982	-.0952	-.0962	-.0972	-.0954	-.0908	-.0769	-.0584	-.0482	-.0454	-.0445	-.0962
100.000	-.0943	-.0972	-.0991	-.0991	-.0982	-.0982	-.0954	-.0935	-.0898	-.0834	-.0593	-.0528	-.0454	-.0345	-.0906
110.000	-.0972	-.0991	-.1001	-.0991	-.0982	-.0874	-.0908	-.0880	-.0861	-.0815	-.0769	-.0649	-.0445	-.0399	-.0906
120.000						-.0767								-.0621	
130.000						-.0639								-.0639	
140.000						-.0565								-.0584	
150.000						-.0501								-.0556	
160.000						-.0436								-.0538	
170.000						-.0390								-.0501	
180.000	-.0437	-.0417	-.0378	-.0378	-.0378	-.0362	-.0380	-.0390	-.0390	-.0417	-.0417	-.0454	-.0454	-.0501	-.0510

X/L	.7290	.7470	.7870	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0288		
70.000							-.0260	-.0316	-.0436
80.000							-.0084	-.0288	-.0473
90.000	-.0417	-.0482	-.0538	-.0528	-.0214	.0073	-.0057	-.0168	-.0390
100.000	-.0288	-.0371	-.0390	-.0205	.0184	.0239			
110.000	-.0288	-.0269	-.0214	.0375	.0586	.0402			
120.000						.1454			
130.000						.2795			
140.000						.1884			
150.000						.1691			
160.000						.1849			
170.000						.1796			
180.000	-.0417	-.0482	-.0528	-.0519	.1340	.3235			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1083) (RQ5004)

IA35 ORBITER ASCENT CONFIGURATION

MACH (1) = 2.500 ALPHA (7) = 6.000 RN/L = 2.5011 BETA = -.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1882	.1582	.1758												
70.000	.1838	.1538	.1917												
80.000	.1802	.1502	.1794												
90.000			.1855	.1379	.0238	-.0214	-.0352	-.0444	-.0536	-.0619	-.0683	-.0739	-.0840	-.0879	-.0968
100.000						-.0011	-.0168	-.0287	-.0444	-.0582	-.0683	-.0766	-.0879	-.0929	-.0997
110.000						.0109	-.0057	-.0251	-.0407	-.0637	-.0768	-.0879	-.0958	-.1007	-.1056
120.000						.0391								-.1204	
130.000						-.0389								-.1076	
140.000						-.1107								-.0948	
150.000						-.1208								-.0811	
160.000						-.1153								-.0683	
170.000						-.1162								-.0594	
180.000						-.1155	-.1089	-.1024	-.0904	-.0748	-.0647	-.0594	-.0575	-.0565	-.0565

X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.1017	-.1047	-.1076	-.1076	-.1076	-.1076	-.1038	-.0983	-.0852	-.0703	-.0582	-.0499	-.0424	-.0396	-.0431
100.000	-.1047	-.1086	-.1115	-.1125	-.1125	-.1115	-.1085	-.1038	-.0955	-.0778	-.0582	-.0489	-.0424	-.0359	-.0384
110.000	-.1098	-.1125	-.1145	-.1155	-.1155	-.1027	-.1085	-.1029	-.0955	-.0862	-.0582	-.0527	-.0424	-.0415	-.0384
120.000						-.0909								-.0554	
130.000						-.0806								-.0703	
140.000						-.0713								-.0722	
150.000						-.0629								-.0685	
160.000						-.0582								-.0657	
170.000						-.0527								-.0629	
180.000	-.0565	-.0565	-.0535	-.0525	-.0535	-.0527	-.0527	-.0545	-.0545	-.0554	-.0573	-.0582	-.0433	-.0620	-.0653

X/L	.7290	.7473	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0505		
70.000							-.0375	-.0422	-.0551
80.000							-.0134	-.0310	-.0533
90.000	-.0477	-.0598	-.0644	-.0663	-.0459	.0005	-.0032	-.0180	-.0449
100.000	-.0568	-.0477	-.0505	-.0403	.0098	.0246			
110.000	-.0594	-.0403	-.0338	.0256	.0504	.0425			
120.000						.1694			
130.000						.1764			
140.000						.1475			
150.000						.1379			
160.000						.1642			
170.000						.1598			
180.000	-.0579	-.0855	-.0883	-.0598	.1204	.2761			

IA35 ORBITER ASCENT CONFIGURATION (R95004)

MACH (2) = 2.950 ALPHA (1) = -3.000 RN/L = 2.5161 BETA = .0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2488	.2837	.2449												
70.000	.2824	.2837	.2074												
80.000	.3478	.2479	.2133												
90.000			.2123	.1689	.0765	.0342	.0290	.0363	.0872	.0683	.0600	.0487	.0375	.0332	.0234
100.000						.0542	.0301	.0249	.0197	.0311	.0538	.0538	.0441	.0364	.0266
110.000						-.0237	-.0237	-.0340	-.0443	-.0474	-.0195	.0114	.0441	.0452	.0419
120.000						.0879								-.0028	
130.000						.0518								-.0115	
140.000						-.0071								-.0050	
150.000						-.0030								.0114	
160.000						.0032								.0266	
170.000						-.0009								.0354	
180.000						-.0009	.0094	.0166	.0259	.0332	.0373	.0375	.0386	.0388	.0384

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0212	.0179	.0168	.0168	.0168	.0157	.0156	.0125	.0125	.0125	.0280	.0187	.0208	.0270	.0274
100.000	.0223	.0201	.0201	.0201	.0201	.0201	.0208	.0208	.0187	.0187	.0166	.0156	.0197	.0280	.0202
110.000	.0334	.0332	.0321	.0299	.0277	-.0148	.0250	.0270	.0280	.0259	.0239	.0177	.0208	.0166	.0111
120.000						-.0301								.0270	
130.000						.0487								.0311	
140.000						.0466								.0342	
150.000						.0363								.0394	
160.000						.0259								.0435	
170.000						.0187								.0456	
180.000	.0332	.0310	.0288	.0255	.0190	.0177	.0177	.0197	.0249	.0290	.0393	.0177	.0208	.0466	.0467

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0365		
70.000							.0416	.0529	.0457
80.000							.0712	.0681	.0569
90.000	.0274	.0172	.0253	.0172	.0192	.0763	.0926	.0753	.0569
100.000	.0284	.0274	.0243	.0274	.0681	.1150			
110.000	.0121	.0182	.0284	.0732	.1421	.1742			
120.000						.1954			
130.000						.3976			
140.000						.3828			
150.000						.3453			
160.000						.3345			
170.000						.3275			
180.000	.0569	.0529	.0478	.0508	.2437	.4222			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063) (RQ5D04)

I.35 ORBITER ASCENT CONFIGURATION

MACH (2) = 2.950 ALPHA (2) = -4.000 RN/L = 2.5161 BETA = .0200

SECTION (1;FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2412	.2294	.2294												
70.000	.2560	.2294	.1851												
80.000	.3082	.2294	.1949												
90.000			.1989	.1339	.0615	.0263	.0346	.0636	.0888	.0553	.0439	.0336	.0226	.0193	.0071
100.000						.0263	.0191	.0160	.0346	.0564	.0512	.0367	.0237	.0171	.0082
110.000						-.0202	-.0223	-.0316	-.0378	-.0213	.0150	.0414	.0337	.0239	.0138
120.000						.0709								-.0061	
130.000						.0336								-.0205	
140.000						-.0244								-.0227	
150.000						-.0244								-.0116	
160.000						-.0171								.0027	
170.000						-.0213								.0175	
180.000						-.0202	-.0120	-.0047	.0025	.0087	.0139	.0138	.0138	.0149	.0127

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0058	-.0006	-.0028	-.0039	-.0039	-.0061	-.0047	-.0078	-.0099	-.0099	.0056	-.0047	.0087	.0005	-.0007
100.000	.0027	-.0017	-.0028	-.0028	-.0039	-.0039	-.0026	-.0037	-.0047	-.0057	-.0068	-.0078	.0067	-.0037	-.0058
110.000	.0084	.0060	.0049	.0049	.0027	-.0083	.0025	.0025	.0025	.0015	.0015	-.0016	.0077	-.0037	-.0048
120.000						-.0161								.0108	
130.000						.0284								.0150	
140.000						.0305								.0191	
150.000						.0274								.0243	
160.000						.0181								.0305	
170.000						.0098								.0315	
180.000	.017	.0071	.0060	.0027	.0016	.0056	.0077	.0139	.0201	.0108	.0315	.0046	.0119	.0326	.0291

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
80.000							.0158		
70.000							.0189	.0250	.0189
80.000							.0332	.0291	.0281
90.000	-.0017	-.0079	-.0027	-.0110	-.0079	.0384	.0322	.0353	.0332
100.000	.0035	-.0017	.0014	.0045	.0343	.0661			
110.000	-.0017	.0003	.0055	.0363	.1032	.0816			
120.000						.1674			
130.000						.3427			
140.000						.3348			
150.000						.2855			
160.000						.2816			
170.000						.2816			
180.000	.0384	.0332	.0281	.0343	.2028	.3427			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1083) (R85004)

IA35 ORBITER ASCENT CONFIGURATION

MACH (2) = 2.950 ALPHA (5) = -1.990 RN/L = 2.5161 BETA = .0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2244	.2086	.2116												
70.000	.2313	.2078	.1892												
80.000	.2707	.2125	.1771												
90.000			.1859	.1245	.0463	.0328	.0557	.0851	.0516	.0559	.0265	.0172	.0082	.0037	-.0082
100.000						.0140	.0130	.0359	.0557	.0455	.0358	.0193	.0082	.0026	-.0075
110.000						-.0214	-.0235	-.0297	-.0236	.0078	.0359	.0269	.0137	.0048	-.0073
120.000						.0536								-.0228	
130.000						.0172								-.0250	
140.000						-.0401								-.0338	
150.000						-.0422								-.0294	
160.000						-.0360								-.0184	
170.000						-.0401								-.0117	
180.000						-.0391	-.0329	-.0266	-.0203	-.0131	-.0078	-.0062	-.0073	-.0073	-.0084

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0117	-.0181	-.0184	-.0217	-.0228	-.0250	-.0249	-.0270	-.0291	-.0291	-.0239	-.0148	-.0002	-.0219	-.0254
100.000	-.0139	-.0184	-.0208	-.0228	-.0228	-.0239	-.0229	-.0239	-.0249	-.0260	-.0249	-.0260	-.0043	-.0229	-.0234
110.000	-.0117	-.0150	-.0173	-.0184	-.0195	-.0184	-.0188	-.0198	-.0198	-.0208	-.0239	-.0219	-.0054	-.0219	-.0213
120.000						-.0173								-.0064	
130.000						.0050								-.0023	
140.000						.0101								.0029	
150.000						.0101								.0070	
160.000						.0060								.0142	
170.000						-.0002								.0163	
180.000	-.0117	-.0128	-.0128	-.0139	-.0117	-.0054	.0008	.0060	.0111	-.0064	-.0002	-.0054	.0029	.0163	.0157

X/L	.7250	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0[illegible]9		
70.000							.0004	.0074	-.0028
80.000							.0064	.0064	.0064
90.000	-.0234	-.0308	-.0224	-.0316	-.0295	.0105	.0146	.0167	.0229
100.000	-.0182	-.0254	-.0215	-.0213	-.0008	.0311			
110.000	-.0182	-.0182	-.0152	.0013	.0691	.0972			
120.000						.1790			
130.000						.3160			
140.000						.2628			
150.000						.2382			
160.000						.2224			
170.000						.2470			
180.000	.0229	.0177	.0136	.0188	.1712	.2924			

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

MACH (2) = 2.950 ALPHA (4) = .010 RN/L = 2.5161 BETA = .0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0370	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4510
PHI															
80.000	.2046	.1829	.1829												
70.000	.2061	.1829	.1524												
60.000	.2382	.1829	.1632												
90.000			.1760	.1118	.0533	.0522	.0564	.0470	.0355	.0230	.0115	.0031	-.0074	-.0118	-.0206
100.000						.0209	.0428	.0533	.0407	.0272	.0146	.0031	-.0074	-.0129	-.0250
110.000						-.0157	-.0178	-.0126	.0261	.0282	.0146	.0026	-.0085	-.0151	-.0261
120.000						.0376								-.0306	
130.000						.0010								-.0361	
140.000						-.0533								-.0394	
150.000						-.0575								-.0405	
160.000						-.0533								-.0339	
170.000						-.0565								-.0272	
180.000						-.0565	-.0502	-.0450	-.0398	-.0335	-.0283	-.0250	-.0228	-.0261	-.0272

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0283	-.0317	-.0350	-.0372	-.0394	-.0416	-.0421	-.0442	-.0452	-.0462	-.0318	-.0442	-.0307	-.0400	-.0436
100.000	-.0295	-.0350	-.0383	-.0394	-.0416	-.0427	-.0400	-.0421	-.0431	-.0431	-.0452	-.0431	-.0307	-.0411	-.0425
110.000	-.0317	-.0350	-.0372	-.0372	-.0394	-.0339	-.0380	-.0390	-.0390	-.0390	-.0390	-.0442	-.0307	-.0400	-.0384
120.000						-.0263								-.0255	
130.000						-.0142								-.0193	
140.000						-.0090								-.0100	
150.000						-.0059								-.0069	
160.000						-.0069								-.0028	
170.000						-.0069								.0013	
180.000	-.0283	-.0283	-.0261	-.0228	-.0184	-.0090	-.0038	.0003	.0045	-.0204	.0065	-.0390	-.0214	.0013	-.0003

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0209		
70.000							-.0106	-.0044	-.0157
80.000							.0018	-.0034	-.0126
90.000	-.0405	-.0436	-.0383	-.0446	-.0374	-.0044	.0049	.0008	.0028
100.000	-.0353	-.0394	-.0374	-.0343	-.0064	.0142			
110.000	-.0383	-.0353	-.0322	-.0106	.0368	.0183			
120.000						.1622			
130.000						.2892			
140.000						.2223			
150.000						.1848			
160.000						.2055			
170.000						.2183			
180.000	.0070	.0008	-.0044	-.0034	.1346	.2626			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

MACH (2) = 2.950 ALPHA (5) = 2.000 RN/L = 2.5161 BETA = .0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1250	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1947	.1730	.1730												
70.000	.1897	.1730	.1425												
80.000	.2075	.1730	.1592												
90.000			.1740	.0942	.0713	.0484	.0359	.0265	.0181	.0056	-.0037	-.0121	-.0223	-.0267	-.0367
100.000						.0431	.0515	.0400	.0254	.0129	-.0006	-.0121	-.0234	-.0289	-.0389
110.000						-.0017	.0077	.0161	.0327	.0098	-.0048	-.0156	-.0278	-.0334	-.0422
120.000						.0286								-.0456	
130.000						-.0100								-.0322	
140.000						-.0631								-.0489	
150.000						-.0683								-.0500	
160.000						-.0652								-.0467	
170.000						-.0683								-.0400	
180.000						-.0694	-.0631	-.0589	-.0537	-.0485	-.0444	-.0422	-.0389	-.0389	-.0389

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0422	-.0467	-.0500	-.0511	-.0522	-.0555	-.0562	-.0572	-.0604	-.0604	-.0500	-.0583	-.0458	-.0552	-.0571
100.000	-.0445	-.0500	-.0522	-.0555	-.0567	-.0578	-.0572	-.0583	-.0572	-.0583	-.0583	-.0572	-.0469	-.0541	-.0361
110.000	-.0478	-.0511	-.0533	-.0555	-.0378	-.0489	-.0562	-.0562	-.0562	-.0562	-.0552	-.0572	-.0469	-.0541	-.0529
120.000						-.0422								-.0437	
130.000						-.0344								-.0354	
140.000						-.0271								-.0251	
150.000						-.0209								-.0209	
160.000						-.0199								-.0188	
170.000						-.0157								-.0147	
180.000	-.0400	-.0389	-.0334	-.0289	-.0234	-.0147	-.0116	-.0105	-.0074	-.0334	-.0085	-.0552	-.0437	-.0136	-.0162

X/L	.7290	.7470	.7870	.8050	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0341		
70.000							-.0236	-.0204	-.0309
80.000							-.0068	-.0173	-.0278
90.000	-.0340	-.0581	-.0488	-.0509	-.0383	-.0036	-.0005	-.0099	-.0141
100.000	-.0498	-.0519	-.0477	-.0383	-.0036	.0142			
110.000	-.0550	-.0488	-.0435	-.0152	.0299	.0205			
120.000						.1212			
130.000						.2571			
140.000						.2071			
150.000						.1581			
160.000						.1787			
170.000						.1581			
180.000	-.0089	-.0152	-.0194	-.0215	.0845	.3590			

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

MACH (2) = 2.950 ALPHA (6) = 4.000 RN/L = 2.5161 BETA = .0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1265	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1897	.1710	.1870												
70.000	.1798	.1710	.1244												
80.000	.1857	.1870	.1405												
90.000			.1551	.0920	.0575	.0261	.0157	.0062	-.0032	-.0126	-.0199	-.0272	-.0362	-.0407	-.0498
100.000						.0439	.0345	.0240	.0104	-.0042	-.0168	-.0262	-.0362	-.0418	-.0507
110.000						.0062	.0251	.0292	.0157	-.0063	-.0199	-.0318	-.0418	-.0473	-.0574
120.000						.0230								-.0663	
130.000						-.0199								-.0607	
140.000						-.0722								-.0596	
150.000						-.0795								-.0585	
160.000						-.0753								-.0574	
170.000						-.0784								-.0518	
180.000						-.0784	-.0732	-.0701	-.0659	-.0617	-.0586	-.0551	-.0518	-.0507	-.0496

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0540	-.0574	-.0607	-.0629	-.0651	-.0663	-.0676	-.0687	-.0718	-.0728	-.0604	-.0697	-.0552	-.0645	-.0635
100.000	-.0562	-.0607	-.0640	-.0663	-.0674	-.0696	-.0697	-.0707	-.0718	-.0718	-.0718	-.0707	-.0552	-.0555	-.0635
110.000	-.0607	-.0651	-.0674	-.0696	-.0718	-.06	-.0718	-.0707	-.0707	-.0697	-.0676	-.0676	-.0552	-.0655	-.0624
120.000						-.0551								-.0583	
130.000						-.0531								-.0520	
140.000						-.0448								-.0417	
150.000						-.0365								-.0354	
160.000						-.0313								-.0334	
170.000						-.0271								-.0302	
180.000	-.0473	-.0440	-.0396	-.0351	-.0307	-.0240	-.0230	-.0230	-.0230	-.0458	-.0240	-.0604	-.0469	-.0292	-.0313

X/L	.7290	.7470	.7670	.7850	.8[illegible]0	.8290	.8620	.9000	.9400
PHI									
80.000							-.0427		
70.000							-.0313	-.0292	-.0386
80.000							-.0126	-.0199	-.0354
90.000	-.0383	-.0372	-.0541	-.0541	-.0386	-.0043	-.0043	-.0126	-.0209
100.000	-.0352	-.0331	-.0541	-.0365	-.0022	.0113			
110.000	-.0362	-.0331	-.0437	-.0033	.0383	.0061			
120.000						.1355			
130.000						.2246			
140.000						.1708			
150.000						.1275			
160.000						.1316			
170.000						.1502			
180.000	-.0240	-.0292	-.0334	-.0354	.0528	.3068			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ5004)

IA35 ORBITER ASCENT CONFIGURATION

MACH (2) = 2.950 ALPHA (7) = 6.010 RN/L = 2.5161 BETA = .0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1786	.1541	.1521												
70.000	.1708	.1541	.1074												
80.000	.1678	.1531	.1168												
90.000			.1442	.0927	.0434	.0057	-.0069	-.0163	-.0247	-.0331	-.0394	-.0446	-.0501	-.0523	-.0601
100.000						.0204	.0130	.0025	-.0100	-.0226	-.0331	-.0425	-.0490	-.0545	-.0625
110.000						.0329	.0246	.0109	-.0038	-.0237	-.0375	-.0468	-.0556	-.0601	-.0678
120.000						.0130								-.0833	
130.000						-.0321								-.0789	
140.000						-.0834								-.0722	
150.000						-.0908								-.0678	
160.000						-.0866								-.0667	
170.000						-.0876								-.0634	
180.000						-.0856	-.0824	-.0782	-.0750	-.0729	-.0698	-.0667	-.0645	-.0623	-.0589

X/L	.4500	.4680	.4860	.5030	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0825	-.0667	-.0689	-.0711	-.0722	-.0744	-.0764	-.0774	-.0806	-.0795	-.0764	-.0722	-.0670	-.0607	-.0560
100.000	-.0858	-.0689	-.0722	-.0744	-.0767	-.0778	-.0785	-.0816	-.0816	-.0827	-.0764	-.0743	-.0670	-.0660	-.0581
110.000	-.0722	-.0756	-.0767	-.0789	-.0811	-.0711	-.0837	-.0837	-.0848	-.0837	-.0764	-.0785	-.0670	-.0712	-.0591
120.000						-.0656								-.0701	
130.000						-.0701								-.0670	
140.000						-.0597								-.0576	
150.000						-.0482								-.0503	
160.000						-.0440								-.0482	
170.000						-.0367								-.0451	
180.000	-.0545	-.0490	-.0434	-.0390	-.0379	-.0367	-.0367	-.0378	-.0378	-.0576	-.0419	-.0712	-.0660	-.0440	-.0436

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.0539		
60.000							-.0354	-.0302	-.0405
70.000							-.0138	-.0169	-.0313
80.000							.0007	-.0086	-.0302
90.000	-.0529	-.0550	-.0418	-.0440	-.0457	-.0045			
100.000	-.0478	-.0488	-.0467	-.0375	-.0045	.0161			
110.000	-.0508	-.0467	-.0364	.0048	.0367	.0295			
120.000						.1383			
130.000						.1737			
140.000						.1363			
150.000						.1140			
160.000						.1253			
170.000						.1304			
180.000	-.0375	-.0418	-.0457	-.0467	.0305	.2552			

IA35 ORBITER ASCENT CONFIGURATION (PQ5004)

MACH (3) = 4.000 ALPHA (1) = -6.000 RN/L = 3.4990 BETA = .0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2278	.2188	.1863												
70.000	.2900	.2192	.1677												
80.000	.3500	.2337	.1839												
90.000			.1938	.1288	.0737	.0464	.0435	.0402	.0336	.0280	.0242	.0228	.0212	.0227	.0310
100.000						.0412	.0398	.0402	.0379	.0322	.0275	.0219	.0153	.0139	.0144
110.000						-.0026	.0007	-.0069	-.0130	-.0182	-.0196	-.0184	-.0057	.0012	.0100
120.000						.1156								-.0052	
130.000						.0930								-.0120	
140.000						.0351								-.0179	
150.000						.0239								-.0179	
160.000						.0275								-.0106	
170.000						.0247								.0002	
180.000						.0200	.0148	.0205	.0242	.0125	.0035	-.0023	.0002	.0041	.0149

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0383	.0417	.0427	.0432	.0432	.0408	.0392	.0333	.0281	.0244	.0222	.0214	.0296	.0303	.0194
100.000	.0183	.0255	.0364	.0457	.0452	.0398	.0379	.0311	.0266	.0236	.0214	.0207	.0288	.0236	.0210
110.000	.0129	.0149	.0129	.53	.0207	.0114	.0296	.0281	.0295	.0303	.0311	.0311	.0296	.0296	.0252
120.000						-.0032								.0452	
130.000						.0162								.0452	
140.000						.0192								.0430	
150.000						.0207								.0400	
160.000						.0251								.0355	
170.000						.0296								.0318	
180.000	.0212	.0258	.0285	.0300	.0305	.0311	.0311	.0303	.0296	.0296	.0296	.0303	.0296	.0296	.0295

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0141		
70.000							.0242	.0252	.0247
80.000							.0401	.0316	.0289
90.000	.0228	.0173	.0162	.0130	.0114	.0395	.0432	.0501	.0560
100.000	.0295	.0252	.0252	.0247	.0358	.0687			
110.000	.0332	.0316	.0348	.0533	.1212	.1254			
120.000						.2321			
130.000						-.0988			
140.000						.3779			
150.000						.2935			
160.000						.2489			
170.000						.2709			
180.000	.0395	.0363	.0353	.0363	.1498	.3669			

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

MACH (3) = 4.000 ALPHA (2) = -3.990 RN/L = 3.4990 BETA = .0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2090	.1990	.1660												
90.000	.2800	.1981	.1660												
80.000	.3068	.2077	.1688												
90.000			.1812	.1083	.0574	.0350	.0293	.0241	.0193	.0141	.0136	.0174	.0220	.0259	.0319
100.000						.0307	.0293	.0279	.0236	.0169	.0117	.0079	.0047	.0052	.0136
110.000						-.0055	-.0055	-.0107	-.0169	-.0236	-.0245	-.0082	.0057	.0076	.0062
120.000						.0917								-.0171	
130.000						.0693								-.0151	
140.000						.0164								-.0077	
150.000						.0079								-.0013	
160.000						.0136								.0027	
170.000						.0112								.0027	
180.000						.0050	.0117	.0155	.0185	.0217	.0188	.0165	.0081	.0012	-.0018

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0319	.0299	.0284	.0259	.0250	.0225	.0206	.0175	.0145	.0115	.0108	.0100	.0093	.0170	.0021
100.000	.0220	.0279	.0294	.0289	.0259	.0235	.0221	.0183	.0153	.0138	.0108	.0078	.0033	.0100	.0016
110.000	.0062	.0111	.0210	.0304	.0319	.0190	.0266	.0221	.0198	.0160	.0123	.0100	.0093	.0063	.0027
120.000						.0111								.0198	
130.000						-.0020								.0221	
140.000						-.0020								.0221	
150.000						-.0028								.0198	
160.000						-.0005								.0160	
170.000						.0033								.0130	
180.000	-.0013	.0002	.0022	.0032	.0037	.0040	.0033	.0040	.0048	.0063	.0070	.0093	.0100	.0108	.0134

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0055		
70.000							.0021	.0043	.0021
80.000							.0140	.0075	.0043
90.000	.0034	-.0008	-.0038	-.0059	-.0075	.0129	.0226	.0183	.0231
100.000	.0088	.0038	.0038	.0016	.0043	.0349			
110.000	.0097	.0070	.0097	.0167	.0758	.0833			
120.000						.2419			
130.000						.3801			
140.000						.3097			
150.000						.2167			
160.000						.2183			
170.000						.2372			
180.000	.0231	.0226	.0210	.0269	.1516	.3081			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(RQ5004)

IA35 ORBITER ASCENT CONFIGURATION

MACH (3) = 4.000 ALPHA (3) = -2.000 RN/L = 3.4990 BETA = .0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1886	.1724	.1490												
70.000	.2317	.1719	.1442												
80.000	.2677	.1824	.1480												
90.000			.1624	.0960	.0439	.0224	.0201	.0177	.0158	.0129	.0156	.0201	.0249	.0259	.0229
100.000						.0220	.0205	.0191	.0158	.0110	.0076	.0062	.0066	.0086	.0180
110.000						-.0067	-.0076	-.0129	-.0186	-.0229	-.0124	.0061	.0061	.0031	.0031
120.000														-.0245	
130.000														-.0245	
140.000						.1								-.0196	
150.000						.0019								-.0127	
160.000						-.0072								-.0082	
170.000						-.0029								-.0018	
180.000						-.0048									
						-.0076	-.0048	-.0014	.0005	.0029	.0045	.0026	-.0003	.0012	.0021

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0194	.0160	.0140	.0120	.0100	.0071	.0067	.0037	.0007	-.0023	-.0031	-.0038	-.0046	-.0038	-.0108
100.000	.0199	.0184	.0155	.0130	.0105	.0076	.0067	.0037	.0007	-.0001	-.0038	-.0053	-.0046	-.0046	-.0108
110.000	.0076	.0150	.0189	.0184	.0135	.0120	.0082	.0044	.0029	.0007	-.0008	-.0023	-.0046	-.0038	-.0097
120.000						.0125								-.0031	
130.000						.0052								-.0023	
140.000						.0007								.0059	
150.000						-.0053								.0052	
160.000						-.0113								.0029	
170.000						-.0113								.0007	
180.000	.0026	.0021	.0021	.0002	-.0087	-.0113	-.0113	-.0113	-.0106	-.0098	-.0083	-.0046	-.0046	-.0028	-.0006

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0210		
70.000							-.0087	-.0065	-.0103
80.000							-.0028	-.0071	-.0081
90.000	-.0081	-.0124	-.0124	-.0157	-.0189	.0005	.0069	-.0017	.0010
100.000	-.0044	-.0081	-.0092	-.0108	-.0049	.0150			
110.000	-.0049	-.0071	-.0065	-.0017	.0429	.0392			
120.000						.2019			
130.000						.3319			
140.000						.2246			
150.000						.1751			
160.000						.1821			
170.000						.1939			
180.000	.0112	.0101	.0101	.0155	.1225	.2616			

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

MACH (3) = 4.000 ALPHA (4) = .010 RN/L = 3.4990 BETA = .0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1540	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1728	.1436	.1349												
70.000	.2038	.1440	.1278												
80.000	.2311	.1603	.1278												
90.000			.1431	.0846	.0353	.0195	.0204	.0171	.0128	.0104	.0128	.0204	.0197	.0182	.0112
100.000						.0161	.0176	.0195	.0161	.0104	.0051	.0037	.0053	.0083	.0122
110.000						-.0074	-.0083	-.0131	-.0169	-.0141	.0051	.0043	-.0022	-.0037	-.0002
120.000						.0549								-.0335	
130.000						.0329								-.0326	
140.000						-.0107								-.0316	
150.000						-.0189								-.0256	
160.000						-.0169								-.0196	
170.000						-.0179								-.0146	
180.000						-.0213	-.0189	-.0165	-.0145	-.0136	-.0117	-.0121	-.0116	-.0146	-.0156

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0062	.0026	-.0002	-.0027	-.0047	-.0077	-.0090	-.0120	-.0143	-.0165	-.0180	-.0188	-.0112	-.0127	-.0245
100.000	.0088	.0048	.0018	-.0022	-.0052	-.0077	-.0090	-.0120	-.0143	-.0165	-.0180	-.0196	-.0127	-.0203	-.0229
110.000	.0048	.0063	.0038	-.0002	-.0047	-.0002	-.0105	-.0135	-.0143	-.0165	-.0180	-.0188	-.0150	-.0218	-.0224
120.000						.0048								-.0120	
130.000						-.0097								-.0059	
140.000						-.0090								-.0029	
150.000						-.0127								-.0029	
160.000						-.0150								-.0029	
170.000						-.0158								-.0052	
180.000	-.0148	-.0151	-.0146	-.0151	-.0161	-.0158	-.0159	-.0158	-.0150	-.0135	-.0112	-.0112	-.0127	-.0052	-.0015

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0331		
70.000							-.0186	-.0149	-.0186
80.000							-.0100	-.0127	-.0175
90.000	-.0192	-.0240	-.0256	-.0240	-.0272	-.0095	-.0063	-.0095	-.0100
100.000	-.0170	-.0208	-.0256	-.0213	-.0100	.0044			
110.000	-.0173	-.0192	-.0175	-.0063	.0306	.0269			
120.000						.1672			
130.000						.2826			
140.000						.1731			
150.000						.1286			
160.000						.1532			
170.000						.1559			
180.000	.0028	.0017	-.0004	.0017	.0685	.2694			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

MACH (3) = 4.000 ALPHA (5) = 1.990 RN/L = 3.4990 BETA = .0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1628	.1373	.1254												
70.000	.1836	.1378	.1249												
80.000	.1999	.1449	.1249												
90.000			.1349	.0796	.0400	.0185	.0138	.0066	.0033	.0028	.0099	.0152	.0093	.0063	-.0001
100.000						.0223	.0200	.0166	.0085	.0009	-.0039	-.0006	.0053	.0058	.0009
110.000						-.0001	-.0001	-.0049	-.0053	-.0001	-.0029	-.0095	-.0110	-.0095	-.0031
120.000						.0409								-.0412	
130.000						.0195								-.0392	
140.000						-.0206								-.0383	
150.000						-.0287								-.0353	
160.000						-.0277								-.0298	
170.000						-.0287								-.0254	
180.000						-.0306	-.0287	-.0268	-.0263	-.0244	-.0244	-.0254	-.0244	-.0244	-.0244

X/L	.4300	.4580	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0041	-.0085	-.0110	-.0140	-.0160	-.0184	-.0193	-.0216	-.0238	-.0261	-.0276	-.0283	-.0216	-.0291	-.0343
100.000	-.0036	-.0070	-.0110	-.0140	-.0165	-.0199	-.0201	-.0223	-.0246	-.0261	-.0276	-.0291	-.0216	-.0306	-.0327
110.000	-.0036	-.0061	-.0100	-.0140	-.0175	-.0110	-.0216	-.0246	-.0253	-.0276	-.0283	-.0291	-.0238	-.0314	-.0332
120.000						-.0056								-.0268	
130.000						-.0201								-.0201	
140.000						-.0178								-.0156	
150.000						-.0193								-.0125	
160.000						-.0223								-.0118	
170.000						-.0253								-.0103	
180.000	-.0274	-.0269	-.0264	-.0269	-.0269	-.0253	-.0253	-.0231	-.0216	-.0186	-.0156	-.0216	-.0186	-.0088	-.0076

X/L	.7290	.7470	.7670	.7850	.8030	.8200	.8620	.9000	.9400
PHI									
60.000							-.0407		
70.000							-.0295	-.0236	-.0242
80.000							-.0188	-.0194	-.0215
90.000	-.0295	-.0338	-.0348	-.0354	-.0359	-.0204	-.0140	-.0183	-.0178
100.000	-.0284	-.0316	-.0316	-.0348	-.0183	-.0071			
110.000	-.0295	-.0306	-.0290	-.0167	.0100	.0095			
120.000						.1093			
130.000						.2310			
140.000						.1658			
150.000						.0730			
160.000						.1253			
170.000						.1242			
180.000	-.0012	-.0034	-.0050	-.0050	.0409	.2405			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ5004)

IA35 ORBITER ASCENT CONFIGURATION

MACH (3) = 4.000 ALPHA (6) = 4.000 RN/L = 3.4990 BETA = .0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1486	.1304	.1218												
70.000	.1634	.1299	.1161												
80.000	.1721	.1299	.1180												
90.000			.1271	.0859	.0251	-.0012	-.0089	-.0108	-.0050	.0036	.0045	.0026	-.0036	-.0068	-.0121
100.000						.0108	.0060	.0007	-.0060	-.0084	-.0027	.0050	.0009	-.0021	-.0096
110.000						.0069	.0050	.0036	.0002	-.0094	-.0156	-.0171	-.0111	-.0066	-.0091
120.000						.0304								-.0380	
130.000						.0055								-.0455	
140.000						-.0304								-.0445	
150.000						-.0381								-.0440	
160.000						-.0381								-.0405	
170.000						-.0385								-.0370	
180.000						-.0395	-.0385	-.0371	-.0366	-.0376	-.0357	-.0365	-.0365	-.0370	-.0365

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0156	-.0191	-.0221	-.0245	-.0265	-.0290	-.0313	-.0344	-.0359	-.0382	-.0397	-.0405	-.0252	-.0412	-.0437
100.000	-.0141	-.0178	-.0216	-.0245	-.0270	-.0295	-.0321	-.0351	-.0367	-.0390	-.0412	-.0420	-.0321	-.0428	-.0432
110.000	-.0141	-.0191	-.0226	-.0310	-.0295	-.0216	-.0351	-.0382	-.0397	-.0412	-.0420	-.0428	-.0435	-.0451	-.0443
120.000						-.0166								-.0451	
130.000						-.0344								-.0397	
140.000						-.0313								-.0313	
150.000						-.0306								-.0268	
160.000						-.0336								-.0237	
170.000						-.0359								-.0207	
180.000	-.0385	-.0365	-.0375	-.0375	-.0375	-.0374	-.0351	-.0321	-.0298	-.0260	-.0230	-.0252	-.0397	-.0199	-.0164

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0464		
70.000							-.0368	-.0282	-.0282
80.000							-.0234	-.0196	-.0234
90.000	-.0393	-.0427	-.0437	-.0437	-.0416	-.0282	-.0148	-.0170	-.0186
100.000	-.0389	-.0411	-.0416	-.0405	-.0325	-.0212			
110.000	-.0405	-.0416	-.0416	-.0271	-.0084	-.0062			
120.000						.0998			
130.000						.1781			
140.000						.1148			
150.000						.0811			
160.000						.0907			
170.000						.0518			
180.000	-.0115	-.0137	-.0218	-.0175	.0205	.2072			

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

MACH (3) = 4.000 ALPHA (7) = 6.010 RN/L = 3.4990 BETA = .0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1417	.1307	.0582												
70.000	.1475	.1307	.1059												
80.000	.1499	.1202	.1116												
90.000			.1207	.0819	.0121	-.0128	-.0161	-.0113	-.0041	-.0013	-.0032	-.0061	-.0120	-.0145	-.0200
100.000						-.0032	-.0085	-.0108	-.0085	-.0013	.0030	-.0013	-.0090	-.0120	-.0190
110.000						.0054	-.0018	-.0065	-.0132	-.0199	-.0156	-.0080	-.0100	-.0130	-.0210
120.000						.0236								-.0454	
130.000						-.0027								-.0504	
140.000						-.0376								-.0499	
150.000						-.0448								-.0494	
160.000						-.0448								-.0479	
170.000						-.0453								-.0459	
180.000						-.0467	-.0458	-.0448	-.0443	-.0438	-.0438	-.0454	-.0454	-.0454	-.0444

X/L	.4300	.4880	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0230	-.0265	-.0295	-.0320	-.0344	-.0369	-.0382	-.0413	-.0435	-.0443	-.0466	-.0474	-.0428	-.0474	-.0499
100.000	-.0230	-.0265	-.0295	-.0325	-.0354	-.0379	-.0390	-.0420	-.0436	-.0451	-.0474	-.0489	-.0428	-.0497	-.0510
110.000	-.0260	-.0300	-.0329	-.0354	-.0379	-.0315	-.0420	-.0436	-.0466	-.0474	-.0489	-.0504	-.0443	-.0527	-.0520
120.000						-.0235								-.0542	
130.000						-.0474								-.0520	
140.000						-.0398								-.0436	
150.000						-.0359								-.0337	
160.000						-.0359								-.0299	
170.000						-.0375								-.0268	
180.000	-.0444	-.0434	-.0429	-.0419	-.0409	-.0390	-.0382	-.0352	-.0321	-.0291	-.0268	-.0428	-.0390	-.0269	-.0243

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0478		
70.000							-.0387	-.0291	-.0297
80.000							-.0233	-.0185	-.0222
90.000	-.0451	-.0478	-.0462	-.0472	-.0398	-.0281	-.0116	-.0126	-.0164
100.000	-.0458	-.0472	-.0472	-.0449	-.0334	-.0169			
110.000	-.0483	-.0488	-.0446	-.0350	-.0190	.0007			
120.000						.0704			
130.000						.1402			
140.000						.0773			
150.000						.0720			
160.000						.0688			
170.000						.0683			
180.000	-.0195	-.0222	-.0238	-.0238	.0065	.1583			

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

MACH (4) = 4.500 ALPHA (1) = -6.000 RN/L = 3.5030 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2381	.2101	.1748												
70.000	.3033	.1955	.1790												
80.000	.3828	.2415	.1781												
90.000			.1990	.1216	.0709	.0459	.0424	.0395	.0354	.0313	.0267	.0238	.0201	.0195	.0195
100.000						.0430	.0389	.0372	.0348	.0319	.0296	.0255	.0195	.0171	.0135
110.000						.0098	.0057	.0022	-.0036	-.0082	-.0112	-.0123	-.0123	-.0075	-.0123
120.000						.1169								-.0075	
130.000						.0919								-.0153	
140.000						.0337								-.0201	
150.000						.0098								-.0213	
160.000						.0104								-.0171	
170.000						.0116								-.0087	
180.000						.0092	.0203	.0180	.0081	-.0013	-.0065	-.0099	-.0075	-.0045	.0063

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0231	.0267	.0315	.0357	.0381	.0387	.0386	.0351	.0315	.0280	.0253	.0226	.0226	.0218	.0117
100.000	.0135	.0159	.0201	.0249	.0297	.0327	.0351	.0333	.0289	.0262	.0218	.0191	.0182	.0173	.0130
110.000	.0171	.0177	.0165	.0135	.0207	.0117	.0138	.0173	.0218	.0218	.0218	.0218	.0218	.0218	.0188
120.000						-.0009								.0377	
130.000						.0022								.0360	
140.000						-.0093								.0333	
150.000						.0155								.0315	
160.000						.0226								.0306	
170.000						.0306								.0289	
180.000	.0147	.0207	.0243	.0273	.0291	.0306	.0306	.0315	.0306	.0306	.0306	.0289	.0289	.0280	.0267

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0058		
70.000							.0169	.0195	.0182
80.000							.0338	.0280	.0215
90.000	.0189		.0084	.0071	.0084	.0358	.0449	.0352	.0371
100.000	.0195	.0189	.0175	.0175	.0280	.0554			
110.000	.0254	.0234	.0267	.0378	.0913	.0932			
120.000						.2703			
130.000						.4417			
140.000						.3400			
150.000						.2847			
160.000						.2139			
170.000						.2335			
180.000	.0332	.0308	.0286	.0293	.0860	.3645			

IA35 ORBITER ASCENT CONFIGURATION (R35004)

MACH (4) = 4.500 ALPHA (2) = -3.990 RN/L = 3.5030 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2138	.1844	.1458												
70.000	.2662	.1738	.1556												
80.000	.3111	.2085	.1597												
90.000			.1791	.1016	.0487	.0317	.0305	.0276	.0240	.0193	.0170	.0158	.0164	.0164	.0200
100.000						.0305	.0281	.0264	.0234	.0193	.0164	.0129	.0103	.0091	.0091
110.000						.0035	.0011	-.0042	-.0100	-.0153	-.0171	-.0150	-.0084	.0013	.0109
120.000						.0965								-.0132	
130.000						.0751								-.0150	
140.000						.0246								-.0120	
150.000						.0152								-.0120	
160.000						.0170								-.0138	
170.000						.0146								-.0132	
180.000						.0099	.0111	.0111	.0064	.0064	.0029	-.0048	-.0108	-.0120	-.0138

X/L	.4550	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0238	.0260	.0272	.0260	.0254	.0236	.0234	.0207	.0180	.0150	.0144	.0127	.0127	.0118	.0096
100.000	.0109	.0146	.0182	.0218	.0242	.0242	.0252	.0225	.0198	.0180	.0144	.0109	.0082	.0073	-.0014
110.000	.0103	.0103	.0115	.0133	.0230	.0218	.0252	.0234	.0198	.0162	.0118	.0091	.0055	.0073	-.0043
120.000						.0182								.0118	
130.000						-.0169								.0162	
140.000						-.0142								.0162	
150.000						-.0070								.0125	
160.000						-.0025								.0118	
170.000						.0028								.0100	
180.000	-.0120	-.0084	-.0034	-.0017	.0001	.0028	.0037	.0046	.0073	.0091	.0091	.0055	.0091	.0091	.0065

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0093		
70.000							-.0020	.0019	-.0007
80.000							.0105	.0066	.0000
90.000	.0092	-.0007	-.0046	-.0073	-.0079	.0112	.0237	.0138	.0105
100.000	.0033	.0000	-.0007	-.0027	.0066	.0362			
110.000	.0013	-.0007	.0019	.0098	.0527	.0533			
120.000						.2497			
130.000						.3863			
140.000						.2471			
150.000						.1930			
160.000						.1917			
170.000						.2056			
180.000	.0151	.0145	.0112	.0171	.0869	.3157			

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

MACH (4) = 4.500 ALPHA (3) = -2.000 RN/L = 3.5030 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1888	.1576	.1312												
70.000	.2329	.1517	.1329												
80.000	.2892	.1808	.1376												
90.000			.1582	.0965	.0388	.0194	.0206	.0218	.0194	.0165	.0141	.0130	.0128	.0140	.0177
100.000						.0224	.0200	.0183	.0165	.0141	.0118	.0100	.0068	.0056	.0056
110.000						.0000	-.0017	-.0070	-.0123	-.0188	-.0159	-.0059	.0068	.0086	.0056
120.000						.0747								-.0180	
130.000						.0547								-.0186	
140.000						.0100								-.0174	
150.000						.0006								-.0107	
160.000						.0018								-.0071	
170.000						.0018								-.0041	
180.000						-.0012	.0006	.0030	.0041	.0047	.0047	.0026	-.0023	-.0029	-.0035

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0189	.0177	.0159	.0140	.0128	.0104	.0095	.0068	.0032	.0023	.0005	-.0004	-.0004	-.0013	-.0106
100.000	.0086	.0122	.0148	.0146	.0128	.0110	.0104	.0077	.0059	.0032	.0005	-.0022	-.0022	-.0031	-.0106
110.000	.0044	.0056	.0074	.0098	.0134	.0110	.0113	.0086	.0059	.0032	.0005	-.0013	-.0031	-.0058	-.0126
120.000						.0129								-.0067	
130.000						-.0112								-.0022	
140.000						-.0112								-.0004	
150.000						-.0184								-.0004	
160.000						-.0184								-.0022	
170.000						-.0157								-.0049	
180.000	-.0089	-.0144	-.0174	-.0174	-.0162	-.0148	-.0148	-.0130	-.0121	-.0112	-.0085	-.0076	-.0067	-.0058	-.0047

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.9620	.9000	.9400
PHI									
80.000							-.0212		
70.000							-.0106	-.0073	-.0113
80.000							-.0060	-.0067	-.0093
90.000	-.0080	-.0100	-.0133	-.0159	-.0165	-.0047	.0045	-.0027	-.0067
100.000	-.0080	-.0086	-.0146	-.0106	-.0027	.0184			
110.000	-.0073	-.0100	-.0113	-.0014	.0295	.0355			
120.000						.2021			
130.000						.3130			
140.000						.1810			
150.000						.1415			
160.000						.1527			
170.000						.1593			
180.000	.0032	.0025	.0039	.0065	.0677	.2515			

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

MACH (4) = 4.500 ALPHA (4) = .000 RN/L = 3.5030 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1727	.1374	.1210												
70.000	.2032	.1356	.1186												
80.000	.2302	.1374	.1215												
90.000			.1403	.0828	.0328	.0176	.0158	.0170	.0152	.0093	.0058	.0052	.0087	.0105	.0117
100.000						.0146	.0158	.0170	.0170	.0146	.0105	.0052	.0008	-.0004	.0026
110.000						-.0030	-.0036	-.0065	-.0106	-.0124	-.0012	.0087	.0044	.0014	-.0034
120.000						.0575								-.0252	
130.000						.0370								-.0246	
140.000						-.0030								-.0246	
150.000						-.0112								-.0210	
160.000						-.0130								-.0155	
170.000						-.0118								-.0125	
180.000						-.0130	-.0118	-.0106	-.0100	-.0095	-.0095	-.0095	-.0107	-.0119	-.0155

X/L	.4520	.4680	.4860	.5030	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0099	.0062	.0038	.0014	-.0004	-.0028	-.0033	-.0060	-.0086	-.0104	-.0104	-.0122	-.0122	-.0167	-.0217
100.000	.0062	.0068	.0056	.0038	.0008	-.0016	-.0024	-.0051	-.0069	-.0095	-.0113	-.0140	-.0140	-.0149	-.0210
110.000	-.0040	-.0022	.0002	.0008	.0014	-.0022	-.0024	-.0051	-.0077	-.0095	-.0122	-.0140	-.0158	-.0167	-.0223
120.000						-.0010								-.0122	
130.000						-.0158								-.0060	
140.000						-.0149								-.0060	
150.000						-.0158								-.0104	
160.000						-.0149								-.0122	
170.000						-.0149								-.0140	
180.000	-.0155	-.0155	-.0137	-.0143	-.0143	-.0140	-.0140	-.0140	-.0140	-.0149	-.0176	-.0185	-.0167	-.0158	-.0138

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0309		
70.000							-.0223	-.0190	-.0217
80.000							-.0151	-.0157	-.0184
90.000	-.0171	-.0223	-.0250	-.0270	-.0283	-.0164	-.0091	-.0105	-.0111
100.000	-.0184	-.0197	-.0210	-.0217	-.0151	.0041			
110.000	-.0184	-.0204	-.0197	-.0091	.0199	.0265			
120.000						.1513			
130.000						.2523			
140.000						.1573			
150.000						.0760			
160.000						.1137			
170.000						.1216			
180.000	-.0083	-.0078	-.0078	-.0045	.0384	.1995			

IA35 ORBITER ASCENT CONFIGURATION (RQ3004)

MACH (4) = 4.500 ALPHA (5) = 1.990 RN/L = 3.5030 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1654	.1319	.1260												
70.000	.1819	.1313	.1248												
80.000	.1955	.1431	.1254												
90.000			.1348	.0889	.0413	.0230	.0142	.0065	-.0011	-.0058	-.0076	-.0070	-.0044	-.0020	-.0008
100.000						.0248	.0242	.0195	.0113	.0024	-.0040	-.0093	-.0129	-.0129	-.0093
110.000						.0065	.0065	.0030	.0024	.0054	.0018	-.0056	-.0123	-.0153	-.0177
120.000						.0419								-.0353	
130.000						.0224								-.0317	
140.000						-.0129								-.0311	
150.000						-.0211								-.0299	
160.000						-.0217								-.0262	
170.000						-.0211								-.0238	
180.000						-.0235	-.0223	-.0217	-.0211	-.0211	-.0205	-.0220	-.0226	-.0226	-.0226

X/L	.4500	.4680	.4860	.5030	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0026	-.0056	-.0080	-.0099	-.0117	-.0141	-.0148	-.0166	-.0184	-.0202	-.0211	-.0229	-.0229	-.0238	-.0318
100.000	-.0056	-.0056	-.0074	-.0093	-.0117	-.0135	-.0148	-.0157	-.0184	-.0193	-.0211	-.0229	-.0247	-.0238	-.0305
110.000	-.0159	-.0135	-.0105	-.0099	-.0093	-.0147	-.0148	-.0184	-.0193	-.0211	-.0229	-.0238	-.0256	-.0229	-.0338
120.000						-.0093								-.0265	
130.000						-.0238								-.0202	
140.000						-.0193								-.0157	
150.000						-.0238								-.0148	
160.000						-.0238								-.0148	
170.000						-.0247								-.0157	
180.000	-.0258	-.0262	-.0256	-.0256	-.0256	-.0233	-.0238	-.0229	-.0220	-.0202	-.0193	-.0184	-.0166	-.0157	-.0148

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0344		
70.000							-.0279	-.0226	-.0246
80.000							-.0187	-.0187	-.0207
90.000	-.0272	-.0292	-.0325	-.0318	-.0305	-.0220	-.0148	-.0134	-.0180
100.000	-.0259	-.0285	-.0279	-.0259	-.0187	-.0069			
110.000	-.0266	-.0292	-.0259	-.0141	.0036	.0095			
120.000						.1040			
130.000						.1959			
140.000						.1375			
150.000						.0522			
160.000						.0942			
170.000						.1021			
180.000	-.0095	-.0095	-.0095	-.0082	.0253	.1907			

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

MACH (4) = 4.500 ALPHA (6) = 4.010 RN/L = 3.5030 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1488	.1190	.1125												
70.000	.1588	.1166	.1090												
80.000	.1684	.1254	.1090												
90.000			.1207	.0827	.0295	.0096	.0008	-.0068	-.0109	-.0109	-.0068	-.0027	-.0018	-.0036	-.0072
100.000						.0149	.0108	.0061	-.0004	-.0068	-.0109	-.0115	-.0072	-.0048	-.0042
110.000						.0067	.0073	.0067	.0067	-.0004	-.0074	-.0126	-.0175	-.0175	-.0126
120.000						.0301								-.0295	
130.000						.0108								-.0362	
140.000						-.0202								-.0350	
150.000						-.0273								-.0344	
160.000						-.0284								-.0325	
170.000						-.0284								-.0307	
180.000						-.0296	-.0296	-.0284	-.0290	-.0290	-.0290	-.0295	-.0301	-.0301	-.0301

X/L	.4600	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0090	-.0114	-.0139	-.0157	-.0181	-.0199	-.0205	-.0223	-.0249	-.0258	-.0276	-.0276	-.0294	-.0294	-.0414
100.000	-.0072	-.0102	-.0126	-.0157	-.0175	-.0199	-.0205	-.0223	-.0241	-.0258	-.0276	-.0294	-.0303	-.0312	-.0387
110.000	-.0096	-.0096	-.0126	-.0157	-.0157	-.0217	-.0223	-.0241	-.0258	-.0276	-.0294	-.0303	-.0312	-.0321	-.0414
120.000						-.0157								-.0348	
130.000						-.0285								-.0348	
140.000						-.0232								-.0249	
150.000						-.0276								-.0205	
160.000						-.0285								-.0196	
170.000						-.0294								-.0178	
180.000	-.0301	-.0295	-.0295	-.0307	-.0313	-.0294	-.0276	-.0276	-.0258	-.0241	-.0223	-.0205	-.0187	-.0178	-.0209

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0440		
70.000							-.0401	-.0328	-.0315
80.000							-.0301	-.0255	-.0268
90.000	-.0348	-.0387	-.0454	-.0421	-.0407	-.0328	-.0215	-.0209	-.0235
100.000	-.0361	-.0381	-.0401	-.0368	-.0334	-.0248			
110.000	-.0374	-.0394	-.0354	-.0281	-.0222	-.0136			
120.000						.0851			
130.000						.1501			
140.000						.0772			
150.000						.0553			
160.000						.0613			
170.000						.0686			
180.000	-.0162	-.0189	-.0195	-.0162	.0089	.1573			

IA35 ORBITER ASCENT CONFIGURATION (RQ5004)

MACH (4) = 4.500 ALPHA (7) = 6.000 RN/L = 3.5030 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1347	.1165	.0976												
70.000	.1394	.1088	.0982												
80.000	.1394	.1156	.1000												
90.000			.1088	.0753	.0171	-.0035	-.0112	-.0112	-.0100	-.0100	-.0070	-.0064	-.0087	-.0111	-.0141
100.000						.0012	-.0064	-.0094	-.0100	-.0117	-.0100	-.0064	-.0075	-.0093	-.0129
110.000						.0012	-.0035	-.0070	-.0117	-.0164	-.0188	-.0160	-.0129	-.0117	-.0141
120.000						.0224								-.0378	
130.000						.0012								-.0420	
140.000						-.0288								-.0414	
150.000						-.0353								-.0414	
160.000						-.0364								-.0402	
170.000						-.0364								-.0390	
180.000						-.0376	-.0376	-.0376	-.0376	-.0382	-.0376	-.0378	-.0384	-.0384	-.0384

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0186	-.0190	-.0214	-.023'	-.0257	-.0275	-.0300	-.0318	-.0336	-.0345	-.0363	-.0372	-.0372	-.0372	-.0456
100.000	-.0154	-.0184	-.0214	-.023.	-.0263	-.0287	-.0291	-.0327	-.0336	-.0354	-.0372	-.0390	-.0399	-.0408	-.0443
110.000	-.0172	-.0196	-.0226	-.0251	-.0245	-.0299	-.0318	-.0336	-.0372	-.0381	-.0399	-.0408	-.0417	-.0426	-.0463
120.000						-.0245								-.0462	
130.000						-.0381								-.0453	
140.000						-.0327								-.0381	
150.000						-.0345								-.0300	
160.000						-.0336								-.0273	
170.000						-.0336								-.0246	
180.000	-.0384	-.0378	-.0372	-.0366	-.0360	-.0345	-.0345	-.0327	-.0318	-.0291	-.0282	-.0264	-.0246	-.0237	-.0233

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0423		
70.000							-.0378	-.0312	-.0279
80.000							-.0286	-.0214	-.0207
90.000	-.0404	-.0423	-.0443	-.0450	-.0417	-.0318	-.0181	-.0155	-.0168
100.000	-.0391	-.0423	-.0423	-.0410	-.0364	-.0246			
110.000	-.0430	-.0423	-.0397	-.0351	-.0266	-.0128			
120.000						.0541			
130.000						.1006			
140.000						.0396			
150.000						.0442			
160.000						.0442			
170.000						.0442			
180.000	-.0207	-.0227	-.0240	-.0207	.0003	.0993			

IA35 ORBITER ASCENT CONFIGURATION (RQ5005) (05 JAN 74)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 IN.
LREF = .0000 IN. YMRP = .0000 IN.
BREF = .0000 IN. ZMRP = .0000 IN.
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = -2.000 ELEVON = .000

MACH (1) = 4.500 ALPHA (1) = -6.000 RN/L = 3.5036 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2798	.2193	.1894												
70.000	.3483	.2314	.1894												
80.000	.4037	.2831	.2026												
90.000			.2423	.1474	.0830	.0577	.0548	.0520	.0491	.0485	.0497	.0548	.0573	.0602	.0661
100.000						.0606	.0560	.0520	.0462	.0410	.0393	.0382	.0383	.0389	.0454
110.000						.0301	.0261	.0215	.0151	.0088	.0077	.0158	.0271	.0306	.0330
120.000						.1434								.0028	
130.000						.1106								-.0084	
140.000						.0433								-.0167	
150.000						.0151								-.0191	
160.000						.0134								-.0173	
170.000						.0151								-.0090	
180.000						.0117	.0226	.0209	.0100	.0008	-.0056	-.0084	-.0072	-.0043	.0070

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0685	.0661	.0638	.0614	.0608	.0578	.0560	.0525	.0472	.0437	.0411	.0384	.0375	.0323	.0219
100.000	.0531	.0596	.0638	.0655	.0632	.0573	.0551	.0490	.0446	.0393	.0358	.0323	.0305	.0323	.0180
110.000	.0395	.0480	.0502	.0549	.0502	.0490	.0463	.0419	.0367	.0323	.0296	.0261	.0244	.0226	.0135
120.000						.0354								.0367	
130.000						.0085								.0481	
140.000						-.0046								.0507	
150.000						.0173								.0481	
160.000						.0244								.0428	
170.000						.0296								.0384	
180.000	.0152	.0218	.0265	.0300	.0312	.0323	.0323	.0323	.0323	.0323	.0323	.0323	.0323	.0314	.0271

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0154		
70.000							.0350	.0376	.0350
80.000							.0408	.0389	.0350
90.000	.0252	.0187	.0141	.0115	.0128	.0434	.0506	.0402	.0447
100.000	.0239	.0193	.0180	.0180	.0376	.0727			
110.000	.0213	.0193	.0232	.0382	.0988	.0929			
120.000						.3381			

IA35 ORBITER ASCENT CONFIGURATION (RQ5005)

MACH (1) = 4.500 ALPHA (1) = -6.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
130.000						.5013			
140.000						.3482			
150.000						.1711			
160.000						.2186			
170.000						.2512			
180.000	.0358	.0330	.0317	.0311	.0942	.3969			

MACH (1) = 4.500 ALPHA (2) = -3.990 RN/L = 3.5036 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2541	.2024	.1737												
70.000	.3069	.2071	.1719												
80.000	.3485	.2506	.1836												
90.000			.2206	.1337	.0651	.0416	.0410	.0404	.0416	.0422	.0463	.0510	.0547	.0571	.0559
100.000						.0474	.0445	.0422	.0375	.0339	.0328	.0334	.0354	.0366	.0444
110.000						.0240	.0210	.0163	.0111	.0081	.0140	.0246	.0264	.0270	.0288
120.000						.1214								-.0067	
130.000						.0938								-.0097	
140.000						.0339								-.0097	
150.000						.0204								-.0115	
160.000						.0199								-.0152	
170.000						.0181								-.0152	
180.000						.0116	.0122	.0116	.0064	.0064	.0028	-.0055	-.0115	-.0140	-.0158

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0341	.0499	.0456	.0432	.0408	.0372	.0361	.0334	.0290	.0272	.0263	.0245	.0245	.0227	.0123
100.000	.0499	.0505	.0487	.0450	.0420	.0378	.0379	.0334	.0308	.0281	.0245	.0209	.0191	.0173	.0083
110.000	.0324	.0384	.0450	.0462	.0426	.0396	.0388	.0334	.0290	.0245	.0191	.0155	.0128	.0083	.0031
120.000						.0366								-.0015	
130.000						-.0150								.0119	
140.000						-.0123								.0182	
150.000						-.0069								.0200	
160.000						-.0033								.0182	
170.000						-.0006								.0155	
180.000	-.0134	-.0103	-.0067	-.0031	-.0007	.0021	.0039	.0039	.0066	.0066	.0083	.0092	.0110	.0119	.0098

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1065) (RQ5005)

IA35 ORBITER ASCENT CONFIGURATION

MACH (1) = 4.500 ALPHA (2) = -3.990

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0013		
70.000							.0077	.0162	.0136
60.000							.0175	.0162	.0129
90.000	.0149	.0077	.0031	-.0002	-.0029	.0129	.0267	.0215	.0208
100.000	.0129	.0070	.0050	.0024	.0129	.0477			
110.000	.0030	.0004	.0011	.0162	.0596	.0773			
120.000						.2784			
130.000						.4088			
140.000						.2822			
150.000						.1654			
160.000						.1660			
170.000						.1680			
180.000	.0175	.0149	.0136	.0155	.0859	.3107			

MACH (1) = 4.500 ALPHA (3) = -1.990 RN/L = 3.5036 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2263	.1887	.1594												
70.000	.2723	.1858	.1588												
80.000	.3035	.2187	.1653			.0345	.0362	.0397	.0427	.0433	.0450	.0465	.0478	.0466	.0418
90.000			.1952	.1189	.0567	.0397	.0368	.0356	.0350	.0333	.0339	.0345	.0357	.0369	.0399
100.000						.0227	.0198	.0163	.0122	.0122	.0180	.0230	.0243	.0249	.0273
110.000						.0966								-.0132	
120.000						.0714								-.0138	
130.000						.0163								-.0132	
140.000						.0063								-.0102	
150.000						.0040								-.0084	
160.000						.0045								-.0059	
170.000						.0004	.0004	.0022	.0034	.0040	.0040	.0019	-.0035	-.0041	-.0041
180.000															

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0387	.0339	.0303	.0273	.0249	.0218	.0202	.0166	.0130	.0112	.0094	.0085	.0076	.0058	-.0013
100.000	.0381	.0351	.0309	.0273	.0243	.0212	.0193	.0166	.0121	.0103	.0076	.0049	.0040	.0031	-.0020
110.000	.0321	.0333	.0321	.0285	.0273	.0182	.0166	.0121	.0112	.0076	.0058	.0040	.0013	.0004	-.0046
120.000						.0255								-.0104	
130.000						-.0050								-.0113	
140.000						-.0068								-.0050	
150.000						-.0140								-.0014	

IA35 ORBITER ASCENT CONFIGURATION (RQ5005)

MACH (1) = 4.500 ALPHA (3) = -1.990

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
160.000						-.0166								.0004	
170.000						-.0166								-.0014	
180.000	-.0078	-.0138	-.0180	-.0180	-.0180	-.0158	-.0149	-.0131	-.0122	-.0095	-.0068	-.0059	-.0041	-.0041	-.0027

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0157		
70.000							-.0033	.0065	.0065
80.000							.0124	.0124	.0071
90.000	.0032	-.0007	-.0040	-.0072	-.0092	.0032	.0169	.0137	.0111
100.000	.0028	.0000	-.0015	-.0033	.0032	.0267			
110.000	.0006	-.0027	-.0027	.0052	.0339	.0522			
120.000						.2180			
130.000						.3162			
140.000						.2063			
150.000						.1338			
160.000						.0959			
170.000						.1260			
180.000	.0032	.0019	.0000	.0104	.0692	.1867			

MACH (1) = 4.500 ALPHA (4) = .010 RN/L = 3.5036 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2045	.1716	.1481												
70.000	.2397	.1692	.1451												
80.000	.2635	.1915	.1481												
90.000			.1745	.1110	.0511	.0341	.0341	.0352	.0364	.0388	.0399	.0393	.0355	.0331	.0276
100.000						.0282	.0294	.0323	.0335	.0317	.0311	.0335	.0343	.0325	.0282
110.000						.0211	.0182	.0164	.0153	.0164	.0211	.0210	.0210	.0216	.0240
120.000						.0758								-.0245	
130.000						.0529								-.0227	
140.000						.0023								-.0221	
150.000						-.0077								-.0215	
160.000						-.0100								-.0178	
170.000						-.0094								-.0142	
180.000						-.0130	-.0124	-.0112	-.0106	-.0106	-.0100	-.0118	-.0124	-.0136	-.0172

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															

IA35 ORBITER ASCENT CONFIGURATION (RQ5005)

MACH (1) = 4.500 ALPHA (4) = .010

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4300	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0240	.0204	.0173	.0137	.0113	.0076	.0085	.0040	.0013	-.0005	-.0032	-.0041	-.0050	-.0059	-.0155
100.000	.0240	.0204	.0167	.0137	.0101	.0064	.0067	.0031	.0004	-.0014	-.0041	-.0059	-.0068	-.0077	-.0148
110.000	.0218	.0185	.0149	.0113	.0131	.0028	.0022	-.0005	-.0023	-.0041	-.0059	-.0077	-.0095	-.0086	-.0181
120.000						.0119								-.0184	
130.000						-.0104								-.0140	
140.000						-.0086								-.0095	
150.000						-.0113								-.0095	
160.000						-.0131								-.0113	
170.000						-.0131								-.0122	
180.000	-.0166	-.0166	-.0154	-.0154	-.0154	-.0140	-.0131	-.0131	-.0113	-.0113	-.0149	-.0149	-.0140	-.0140	-.0155

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0273		
70.000							-.0168	-.0089	-.0089
80.000							-.0024	.0022	-.0017
90.000	-.0102	-.0148	-.0162	-.0181	-.0188	-.0043	.0120	.0068	.0015
100.000	-.0109	-.0148	-.0155	-.0155	-.0063	.0101			
110.000	-.0135	-.0168	-.0155	-.0043	.0153	.0258			
120.000						.1792			
130.000						.2719			
140.000						.1372			
150.000						.0835			
160.000						.0704			
170.000						.0999			
180.000	-.0102	-.0129	-.0135	-.0030	.0396	.1477			

MACH (1) = 4.500 ALPHA (5) = 2.000 RN/L = 3.5036 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1921	.1581	.1434												
70.000	.2104	.1569	.1404												
80.000	.2250	.1696	.1387												
90.000			.1557	.1069	.0487	.0323	.0252	.0241	.0276	.0329	.0311	.0282	.0238	.0214	.0154
100.000						.0258	.0258	.0258	.0229	.0229	.0288	.0294	.0244	.0220	.0172
110.000						.0188	.0176	.0176	.0182	.0164	.0141	.0147	.0184	.0184	.0147
120.000						.0587								-.0222	
130.000						.0364								-.0300	
140.000						-.0088								-.0300	
150.000						-.0188								-.0288	

IA35 ORBITER ASCENT CONFIGURATION (RQ5005)

MACH (1) = 4.500 ALPHA (5) = 2.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
180.000						-.0206								-.0276	
170.000						-.0206								-.0252	
160.000						-.0229	-.0224	-.0224	-.0224	-.0224	-.0218	-.0234	-.0234	-.0240	-.0228
X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0123	.0081	.0051	.0020	-.0004	-.0034	-.0041	-.0059	-.0095	-.0113	-.0140	-.0149	-.0158	-.0158	-.0268
100.000	.0123	.0067	.0057	.0020	-.0010	-.0040	-.0050	-.0086	-.0095	-.0122	-.0149	-.0158	-.0175	-.0184	-.0263
110.000	.0105	.0069	.0033	.0002	.0020	-.0076	-.0095	-.0113	-.0140	-.0158	-.0166	-.0184	-.0202	-.0184	-.0288
120.000						.0014								-.0310	
130.000						-.0211								-.0292	
140.000						-.0158								-.0247	
150.000						-.0220								-.0193	
160.000						-.0220								-.0158	
170.000						-.0229								-.0158	
180.000	-.0246	-.0264	-.0258	-.0258	-.0252	-.0238	-.0229	-.0220	-.0202	-.0184	-.0175	-.0158	-.0158	-.0158	-.0188
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400						
PHI															
60.000							-.0347								
70.000							-.0281	-.0201	-.0188						
80.000							-.0155	-.0108	-.0128						
90.000	-.0221	-.0268	-.0294	-.0314	-.0314	-.0208	-.0042	-.0049	-.0089						
100.000	-.0228	-.0262	-.0281	- 0281	-.0221	-.0075									
110.000	-.0274	-.0288	-.0281	-.0189	-.0062	.0137									
120.000						.1298									
130.000						.2074									
140.000						.1026									
150.000						.0522									
160.000						.0568									
170.000						.0760									
180.000	-.0162	-.0175	-.0188	-.0142	.0183	.1092									

IA35 ORBITER ASCENT CONFIGURATION (RQ5005)

MACH (1) = 4.500 ALPHA (6) = 4.000 RN/L = 3.5036 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1773	.1538	.1355												
70.000	.1873	.1467	.1520												
80.000	.1920	.1532	.1314												
90.000			.1437	.1043	.0590	.0172	.0172	.0207	.0219	.0248	.0225	.0185	.0143	.0119	.0052
100.000						.0254	.0219	.0213	.0207	.0254	.0268	.0225	.0161	.0125	.0064
110.000						.0276	.0201	.0183	.0148	.0095	.0119	.0185	.0149	.0113	.0034
120.000						.0454								-.0245	
130.000						.0219								-.0372	
140.000						-.0182								-.0354	
150.000						-.0282								-.0348	
160.000						-.0299								-.0342	
170.000						-.0299								-.0336	
180.000						-.0311	-.0311	-.0311	-.0311	-.0317	-.0317	-.0318	-.0324	-.0330	-.0324

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0022	-.0015	-.0045	-.0075	-.0099	-.0130	-.0140	-.0158	-.0193	-.0202	-.0229	-.0238	-.0238	-.0247	-.0355
100.000	.0022	-.0015	-.0057	-.0087	-.0118	-.0142	-.0149	-.0184	-.0193	-.0220	-.0230	-.0256	-.0274	-.0274	-.0361
110.000	-.0015	-.0051	-.0081	-.0112	-.0087	-.0178	-.0175	-.0202	-.0220	-.0247	-.0274	-.0283	-.0292	-.0319	-.0399
120.000						-.0099								-.0429	
130.000						-.0328								-.0401	
140.000						-.0256								-.0401	
150.000						-.0310								-.0337	
160.000						-.0292								-.0302	
170.000						-.0292								-.0256	
180.000	-.0318	-.0312	-.0303	-.0312	-.0318	-.0301	-.0292	-.0283	-.0274	-.0256	-.0247	-.0238	-.0238	-.0247	-.0255

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0394		
70.000							-.0341	-.0235	-.0189
80.000							-.0242	-.0130	-.0116
90.000	-.0288	-.0328	-.0361	-.0381	-.0388	-.0295	-.0130	-.0077	-.0077
100.000	-.0308	-.0328	-.0361	-.0388	-.0315	-.0182			
110.000	-.0341	-.0368	-.0368	-.0295	-.0182	.0089			
120.000						.1115			
130.000						.1565			
140.000						.0427			
150.000						.0102			
160.000						.0254			
170.000						.0354			
180.000	-.0235	-.0242	-.0262	-.0202	.0043	.1055			

IA35 ORBITER ASCENT CONFIGURATION (RQ5005)

MACH (1) = 4.500 ALPHA (7) = 6.000 RN/L = 3.5036 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3330	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1638	.1444	.1027												
70.000	.1661	.1373	.1127												
80.000	.1643	.1373	.1150												
90.000			.1256	.0886	.0287	.0246	.0246	.0263	.0246	.0199	.0152	.0117	.0064	.0039	-.0021
100.000						.0170	.0217	.0217	.0193	.0181	.0181	.0134	.0064	.0039	-.0021
110.000						.0140	.0117	.0117	.0134	.0152	.0152	.0112	.0058	.0021	-.0051
120.000						.0369								-.0269	
130.000						.0123								-.0421	
140.000						-.0253								-.0415	
150.000						-.0330								-.0403	
160.000						-.0359								-.0403	
170.000						-.0359								-.0397	
180.000						-.0365	-.0371	-.0371	-.0394	-.0377	-.0394	-.0391	-.0391	-.0397	-.0391

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0057	-.0094	-.0124	-.0160	-.0185	-.0215	-.0221	-.0248	-.0275	-.0284	-.0293	-.0310	-.0319	-.0293	-.0428
100.000	-.0064	-.0094	-.0130	-.0166	-.0177	-.0227	-.0239	-.0257	-.0275	-.0293	-.0310	-.0328	-.0328	-.0346	-.0428
110.000	-.0088	-.0118	-.0134	-.0191	-.0179	-.0263	-.0275	-.0302	-.0310	-.0328	-.0346	-.0355	-.0364	-.0382	-.0461
120.000						-.0154								-.0472	
130.000						-.0427								-.0472	
140.000						-.0364								-.0472	
150.000						-.0373								-.0436	
160.000						-.0346								-.0400	
170.000						-.0328								-.0337	
180.000	-.0385	-.0372	-.0360	-.0360	-.0342	-.0328	-.0328	-.0328	-.0319	-.0310	-.0310	-.0310	-.0310	-.0310	-.0323

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0395		
70.000							-.0336	-.0276	-.0237
80.000							-.0243	-.0171	-.0138
90.000	-.0362	-.0395	-.0415	-.0428	-.0415	-.0290	-.0138	-.0065	-.0058
100.000	-.0382	-.0402	-.0402	-.0408	-.0362	-.0243			
110.000	-.0422	-.0435	-.0428	-.0375	-.0270	.0021			
120.000						.0952			
130.000						.1209			
140.000						.0126			
150.000						-.0039			
160.000						.0206			
170.000						.0107			
180.000	-.0298	-.0316	-.0303	-.0270	-.0032	.1401			

IA35 ORBITER ASCENT CONFIGURATION (RQ5006) (03 JAN 74)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 IN.
LREF = .0000 IN. YMRP = .0000 IN.
BREF = .0000 IN. ZMRP = .0000 IN.
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = -4.000 ELEVON = .000

MACH (1) = 2.500 ALPHA (1) = -5.990 RN/L = 2.5019 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3359	.3421	.4041												
70.000	.3634	.3457	.3944												
80.000	.4121	.3412	.3678												
90.000			.3660	.3554	.2128	.1322	.1172	.1039	.0889	.0694	.0587	.0499	.0399	.0339	.0264
100.000						.1491	.1296	.1110	.0862	.0658	.0508	.0375	.0303	.0245	.0217
110.000						.1243	.1128	.0977	.0773	.0517	.0348	.0274	.0236	.0188	.0217
120.000						.1707								.0373	
130.000						.0711								.0365	
140.000						-.0156								.0312	
150.000						-.0174								.0303	
160.000						-.0075								.0312	
170.000						-.0174								.0392	
180.000						-.0301	-.0147	.0033	.0195	.0286	.0304	.0295	.0312	.0312	.0283

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0228	.0217	.0217	.0245	.0264	.0217	.0195	.0186	.0168	.0186	.0304	.0437	.0569	.0640	.0676
100.000	.0198	.0226	.0236	.0245	.0264	.0255	.0240	.0231	.0195	.0204	.0231	.0313	.0552	.0653	.0610
110.000	.0228	.0274	.0284	.0274	.0274	-.0204	.0267	.0277	.0267	.0267	.0231	.0240	.0341	.0341	.0488
120.000						-.0414								.0303	
130.000						.0375								.0313	
140.000						.0401								.0295	
150.000						.0401								.0284	
160.000						.0393								.0313	
170.000						.0348								.0151	
180.000	.0322	.0330	.0356	.0339	.0293	.0277	.0267	.0231	.0195	.0168	.0231	.0141	.0357	.0133	.0114

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0937		
70.000							.1016	.0928	.0796
80.000							.1226	.0937	.0726
90.000	.0368	.0410	.0392	.0383	.0497	.1182	.1244	.1147	.0770
100.000	.0899	.0585	.0533	.0541	.1182	.1639			
110.000	.0978	.0708	.0691	.1077	.2113	.1753			
120.000						.3650			

IA35 ORBITER ASCENT CONFIGURATION (REF 36)

MACH (1) = 2.500 ALPHA (1) = -5.990

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
130.000						.5091			
140.000						.3396			
150.000						.2350			
160.000						.3229			
170.000						.3413			
180.000	.0238	.0195	.0123	.0222	.2544	.4274			

MACH (1) = 2.500 ALPHA (2) = -3.990 RN/L = 2.5019 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3278	.3419	.3702												
70.000	.3375	.3375	.3809												
80.000	.3729	.3278	.3623												
90.000			.3561	.3231	.1826	.1118	.0941	.0799	.0666	.0525	.0418	.0339	.0224	.0195	.0080
100.000						.1286	.1073	.0914	.0702	.0489	.0356	.0220	.0128	.0031	-.0007
110.000						.1126	.0994	.0817	.0622	.0365	.0229	.0118	.0070	.0012	-.0046
120.000						.1560								-.0007	
130.000						.0675								.0041	
140.000						-.0264								.0022	
150.000						-.0383								-.0017	
160.000						-.0310								.0012	
170.000						-.0402								.0031	
180.000						-.0530	-.0383	-.0228	-.0063	.0037	.0101	.0070	.0051	.0060	.0051

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0031	.0022	-.0017	-.0017	.0012	.0002	-.0008	-.0063	-.0054	-.0054	.0001	.0120	.0266	.0321	.0330
100.000	-.0036	-.0046	-.0027	.0012	.0012	.0022	-.0008	-.0008	-.0027	-.0027	-.0008	.0120	.0248	.0248	.0330
110.000	-.0058	-.0017	-.0007	.0012	-.0007	-.0065	.0028	.0019	.0028	.0010	-.0008	-.0008	.0101	.0101	.0202
120.000						-.0171								.0074	
130.000						.0092								.0047	
140.000						.0129								.0047	
150.000						.0138								.0010	
160.000						.0129								.0001	
170.000						.0129								-.0045	
180.000	.0080	.0070	.0089	.0080	.0051	.0010	.0010	-.0017	-.0036	-.0045	-.0008	-.0017	.0083	-.0036	-.0062

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									

IA35 ORBITER ASCENT CONFIGURATION (RQ5006)

MACH (1) = 2.500 ALPHA (2) = -3.990

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0629		
70.000							.0690	.0646	.0550
80.000							.0928	.0690	.0506
90.000	.0303	.0221	.0175	.0175	.0347	.0963	.1024	.0805	.0541
100.000	.0409	.0312	.0339	.0321	.0936	.1323			
110.000	.0356	.0400	.0400	.0558	.1649	.1429			
120.000						.3487			
130.000						.4691			
140.000						.2862			
150.000						.1939			
160.000						.2739			
170.000						.2924			
180.000	.0093	.0020	-.0035	.0166	.2168	.3663			

MACH (1) = 2.500 ALPHA (3) = -1.960 RN/L = 2.5019 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3198	.3437	.3419												
70.000	.3136	.3224	.3623												
80.000	.3373	.3224	.3525												
90.000			.3711	.2950	.1560	.0923	.0746	.0595	.0524	.0383	.0266	.0129	.0080	.0032	-.0023
100.000						.1064	.0896	.0719	.0516	.0339	.0211	.0084	-.0025	-.0074	-.0160
110.000						.1011	.0852	.0693	.0489	.0221	.0079	-.0016	-.0112	-.0170	-.0227
120.000						.1416								-.0314	
130.000						.0533								-.0218	
140.000						-.0399								-.0237	
150.000						-.0536								-.0276	
160.000						-.0499								-.0237	
170.000						-.0581								-.0199	
180.000						-.0591	-.0591	-.0445	-.0281	-.0171	-.0135	-.0131	-.0141	-.0160	-.0179

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7190
PHI															
90.000	-.0141	-.0170	-.0189	-.0218	-.0199	-.0227	-.0226	-.0235	-.0252	-.0235	-.0190	-.0190	-.0135	.0102	.0120
100.000	-.0208	-.0237	-.0247	-.0227	-.0208	-.0208	-.0217	-.0226	-.0244	-.0244	-.0217	-.0190	-.0126	.0002	.0093
110.000	-.0247	-.0256	-.0237	-.0227	-.0218	-.0160	-.0190	-.0226	-.0217	-.0226	-.0217	-.0180	-.0126	-.0117	-.0026
120.000						-.0160								-.0171	
130.000						-.0171								-.0171	
140.000						-.0126								-.0190	
150.000						-.0117								-.0180	

IA35 ORBITER ASCENT CONFIGURATION (RQ5006)

MACH (1) = 2.500 ALPHA (3) = -1.950

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
160.000						-.0108								-.0190	
170.000						-.0144								-.0190	
180.000	-.0135	-.0160	-.0131	-.0150	-.0179	-.0180	-.0199	-.0208	-.0208	-.0190	-.0190	-.0180	-.0126	-.0153	-.0180

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0400		
70.000							.0514	.0453	.0303
80.000							.0725	.0344	.0239
90.000	.0075	-.0117	-.0044	-.0026	.0157	.0725	.0752	.0602	.0338
100.000	.0184	.0102	.0111	.0120	.0752	.1024			
110.000	.0120	.0188	.0184	.0585	.1438	.1270			
120.000						.3223			
130.000						.4348			
140.000						.2396			
150.000						.1526			
160.000						.2304			
170.000						.2475			
180.000	-.0080	-.0171	-.0226	.0129	.1816	.3082			

MACH (1) = 2.500 ALPHA (4) = .000 RN/L = 2.5019 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3095	.3521	.3193												
70.000	.2998	.3281	.3343												
80.000	.3051	.3168	.3529												
90.000			.3529	.2670	.1295	.0684	.0462	.0436	.0338	.0193	.0120	.0038	-.0067	-.0135	-.0251
100.000						.0879	.0693	.0427	.0365	.0211	.0074	-.0044	-.0145	-.0213	-.0309
110.000						.0879	.0701	.0471	.0356	.0093	-.0053	-.0154	-.0242	-.0300	-.0377
120.000						.1313								-.0571	
130.000						.0365								-.0503	
140.000						-.0573								-.0455	
150.000						-.0682								-.0493	
160.000						-.0682								-.0455	
170.000						-.0718								-.0387	
180.000						-.0855	-.0746	-.0618	-.0445	-.0354	-.0327	-.0319	-.0329	-.0338	-.0329

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															

IA35 ORBITER ASCENT CONFIGURATION (RQ5006)

MACH (1) = 2.500 ALPHA (4) = .000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0290	-.0329	-.0348	-.0358	-.0358	-.0397	-.0411	-.0420	-.0411	-.0411	-.0356	-.0247	-.0137	-.0027	-.0002
100.000	-.0368	-.0387	-.0416	-.0416	-.0426	-.0416	-.0411	-.0411	-.0420	-.0393	-.0393	-.0237	-.0155	-.0128	-.0002
110.000	-.0416	-.0445	-.0445	-.0474	-.0464	-.0309	-.0411	-.0411	-.0420	-.0411	-.0402	-.0384	-.0228	-.0265	-.0122
120.000						-.0261								-.0384	
130.000						-.0429								-.0393	
140.000						-.0365								-.0375	
150.000						-.0329								-.0375	
160.000						-.0311								-.0356	
170.000						-.0320								-.0329	
180.000	-.0329	-.0348	-.0329	-.0319	-.0348	-.0347	-.0356	-.0356	-.0329	-.0320	-.0365	-.0292	-.0237	-.0311	-.0334

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
90.000							.0164		
70.000							.0329	.0256	.0127
80.000							.0628	.0338	.0110
90.000	-.0057	-.0131	-.0177	-.0205	-.0002	.0654	.0619	.0117	.0173
100.000	.0053	-.0085	-.0076	-.0020	.0689	.0943			
110.000	-.0112	-.0048	.0016	.0513	.1216	.1145			
120.000						.2954			
130.000						.3989			
140.000						.1944			
150.000						.1233			
160.000						.1900			
170.000						.2093			
180.000	-.0241	-.0316	-.0361	.0201	.1523	.2550			

MACH (1) = 2.500 ALPHA (5) = 1.990 RN/L = 2.5019 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2984	.3922	.2896												
70.000	.2816	.3267	.3020												
80.000	.2790	.3152	.3232												
90.000			.3365	.2303	.0949	.0427	.0311	.0239	.0184	.0065	-.0035	-.0117	-.0213	-.0261	-.0368
100.000						.0604	.0515	.0391	.0220	.0056	-.0062	-.0163	-.0280	-.0338	-.0433
110.000						.0789	.0577	.0382	.0184	-.0053	-.0199	-.0300	-.0387	-.0455	-.0513
120.000						.1126								-.0803	
130.000						.0238								-.0774	
140.000						-.0700								-.0687	
150.000						-.0800								-.0687	

IA35 ORBITER ASCENT CONFIGURATION (RQ5006)

MACH (1) = 2.500 ALPHA (5) = 1.990

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0270	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
180.000						-.0800								-.0668	
170.000						-.0846								-.0581	
160.000						-.0946	-.0873	-.0737	-.0609	-.0536	-.0500	-.0503	-.0503	-.0503	-.0513

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0418	-.0474	-.0493	-.0503	-.0493	-.0523	-.0536	-.0545	-.0536	-.0472	-.0324	-.0168	-.0361	-.0048	-.0070
100.000	-.0493	-.0542	-.0561	-.0561	-.0571	-.0581	-.0564	-.0573	-.0573	-.0545	-.0462	-.0324	-.0306	-.0103	-.0070
110.000	-.0581	-.0581	-.0610	-.0639	-.0648	-.0464	-.0637	-.0619	-.0591	-.0582	-.0555	-.0481	-.0315	-.0232	-.0179
120.000						-.0397								-.0564	
130.000						-.0665								-.0564	
140.000						-.0601								-.0564	
150.000						-.0545								-.0527	
160.000						-.0508								-.0490	
170.000						-.0499								-.0462	
180.000	-.0493	-.0503	-.0503	-.0493	-.0523	-.0508	-.0508	-.0481	-.0444	-.0444	-.0426	-.0462	-.0306	-.0462	-.0470

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0134		
70.000							.0121	.0102	-.0025
80.000							.0443	.0211	.0003
90.000	-.0125	-.0243	-.0288	-.0324	-.0279	.0426	.0610	.0239	.0102
100.000	-.0025	-.0170	-.0197	-.0306	.0175	.0813			
110.000	-.0097	-.0161	-.0152	.0130	.1120	.1270			
120.000						.3178			
130.000						.3529			
140.000						.1419			
150.000						.0962			
160.000						.1463			
170.000						.1569			
180.000	-.0408	-.0452	-.0470	.0514	.1217	.2114			

IA35 ORBITER ASCENT CONFIGURATION (RQ5006)

MACH (1) = 2.500 ALPHA (6) = 4.020 RN/L = 2.5019 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3730	.3940	.4050	.4310
PHI															
80.000	.2855	.3554	.2474												
70.000	.2740	.3191	.2625												
80.000	.2618	.3005	.2749												
90.000			.2975	.1925	.0685	.0176	.0038	-.0017	-.0044	-.0117	-.0190	-.0254	-.0359	-.0417	-.0495
100.000						.0366	.0249	.0166	.0020	-.0090	-.0101	-.0300	-.0408	-.0466	-.0563
110.000						.0605	.0411	.0221	.0029	-.0190	-.0328	-.0437	-.0525	-.0583	-.0651
120.000						.0898								-.1011	
130.000						.0157								-.1021	
140.000						-.0895								-.0943	
150.000						-.0986								-.0894	
160.000						-.0922								-.0865	
170.000						-.0932								-.0769	
180.000						-.1060	-.0986	-.0867	-.0767	-.0712	-.0675	-.0670	-.0680	-.0680	-.0680

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0573	-.0593	-.0632	-.0632	-.0612	-.0612	-.0636	-.0618	-.0544	-.0470	-.0305	-.0185	-.0388	-.0087	-.0091
100.000	-.0632	-.0681	-.0700	-.0700	-.0690	-.0700	-.0692	-.0692	-.0655	-.0609	-.0480	-.0323	-.0286	-.0143	-.0119
110.000	-.0719	-.0748	-.0778	-.0797	-.0816	-.0612	-.0811	-.0793	-.0756	-.0747	-.0655	-.0544	-.0295	-.0311	-.0238
120.000						-.0544								-.0719	
130.000						-.0922								-.0728	
140.000						-.0839								-.0710	
150.000						-.0765								-.0682	
160.000						-.0719								-.0646	
170.000						-.0692								-.0636	
180.000	-.0690	-.0690	-.0680	-.0697	-.0690	-.0655	-.0646	-.0636	-.0599	-.0599	-.0581	-.0563	-.0378	-.0618	-.0615

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0339		
70.000							-.0190	.0001	-.0128
80.000							.0322	.0138	-.0091
90.000	-.0193	-.0302	-.0367	-.0394	-.0394	.0083	.0533	.0294	-.0009
100.000	-.0082	-.0220	-.0275	-.0339	-.0201	.0691			
110.000	-.0229	-.0275	-.0275	-.0192	.0884	.1279			
120.000						.3212			
130.000						.3185			
140.000						.1007			
150.000						.0700			
160.000						.1077			
170.000						.1192			
180.000	-.0805	-.0587	-.0541	.0480	.1033	.1868			

IA35 ORBITER ASCENT CONFIGURATION (RQ5006)

MACH (1) = 2.500 ALPHA (7) = 5.990 RN/L = 2.5019 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2933	.3145	.2198												
70.000	.2614	.3110	.2269												
80.000	.2419	.2915	.2375												
90.000			.2517	.1569	.0435	-.0029	-.0130	-.0185	-.0221	-.0295	-.0350	-.0405	-.0480	-.0529	-.0627
100.000						.0136	.0008	-.0038	-.0130	-.0240	-.0332	-.0423	-.0519	-.0578	-.0685
110.000						.0382	.0210	-.0047	-.0093	-.0304	-.0451	-.0539	-.0627	-.0685	-.0773
120.000						.0639								-.1173	
130.000						-.0084								-.1212	
140.000						-.0983								-.1173	
150.000						-.1139								-.1095	
160.000						-.1139								-.1066	
170.000						-.1075								-.0949	
180.000						-.1130	-.1093	-.1020	-.0946	-.0919	-.0882	-.0871	-.0871	-.0871	-.0861

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0676	-.0724	-.0724	-.0724	-.0695	-.0676	-.0611	-.0527	-.0462	-.0359	-.0266	-.0173	-.0090	-.0052	-.0122
100.000	-.0734	-.0773	-.0802	-.0822	-.0812	-.0783	-.0741	-.0657	-.0583	-.0499	-.0415	-.0322	-.0155	-.0183	-.0159
110.000	-.0822	-.0851	-.0880	-.0910	-.0920	-.0705	-.0909	-.0871	-.0788	-.0704	-.0629	-.0546	-.0164	-.0415	-.0343
120.000						-.0546								-.1020	
130.000						-.1169								-.0834	
140.000						-.1067								-.0788	
150.000						-.0974								-.0769	
160.000						-.0881								-.0769	
170.000						-.0834								-.0750	
180.000	-.0851	-.0841	-.0822	-.0802	-.0783	-.0778	-.0741	-.0741	-.0732	-.0741	-.0722	-.0536	-.0620	-.0769	-.0739

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0444		
70.000							-.0371	-.0159	-.0196
80.000							.0090	.0025	-.0187
90.000	-.0187	-.0343	-.0473	-.0463	-.0435	-.0361	.0434	.0228	-.0113
100.000	-.0141	-.0297	-.0361	-.0601	-.0398	.0504			
110.000	-.0279	-.0518	-.0463	-.0463	.0346	.1469			
120.000						.2977			
130.000						.2618			
140.000						.0565			
150.000						.0399			
160.000						.0820			
170.000						.0767			
180.000	-.0865	-.0893	-.0575	.0337	.0730	.1706			

IA35 ORBITER ASCENT CONFIGURATION (RQ5006)

MACH (2) = 2.950 ALPHA (1) = -5.990 RN/L = 2.3130 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3136	.3057	.3146												
70.000	.3709	.3047	.2770												
80.000	.4272	.3156	.2711												
90.000			.2830	.2247	.1921	.1684	.1585	.1476	.1328	.1166	.1043	.0931	.0820	.0766	.0625
100.000						.1328	.1674	.1565	.1397	.1186	.1043	.0900	.0766	.0690	.0582
110.000						.0512	.0625	.0686	.1358	.1166	.0982	.0831	.0712	.0625	.0549
120.000						.1417								.0484	
130.000						.0941								.0419	
140.000						.0165								.0289	
150.000						.0073								.0148	
160.000						.0155								.0170	
170.000						.0114								.0256	
180.000						-.0018	.0053	.0155	.0257	.0308	.0339	.0311	.0311	.0278	.0267

X/L	.4500	.4620	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0571	.0523	.0495	.0424	.0473	.0441	.0444	.0393	.0383	.0362	.0383	.0413	.0383	.0454	.0437
100.000	.0517	.0473	.0463	.0463	.0441	.0441	.0454	.0434	.0403	.0403	.0393	.0393	.0383	.0444	.0426
110.000	.0506	.0495	.0495	.0484	.0452	.0040	.0454	.0454	.0454	.0434	.0393	.0393	.0383	.0393	.0395
120.000						-.0177								.0413	
130.000						.0525								.0413	
140.000						.0546								.0413	
150.000						.0515								.0383	
160.000						.0485								.0332	
170.000						.0424								.0261	
180.000	.0256	.0256	.0311	.0343	.0322	.0332	.0332	.0312	.0312	.0383	.0383	.0393	.0383	.0200	.0153

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							.0700		
70.000							.0842	.0913	.0741
80.000							.0994	.0954	.0751
90.000	.0408	.0325	.0204	.0256	.0295	.0964	.1075	.1146	.1065
100.000	.0437	.0398	.0396	.0274	.0700	.1268			
110.000	.0427	.0406	.0396	.0660	.1723	.1447			
120.000						.3462			
130.000						.4845			
140.000						.3363			
150.000						.2237			
160.000						.2128			
170.000						.3175			
180.000	.0274	.0183	.0163	.0477	.1980	.2929			

IA35 ORBITER ASCENT CONFIGURATION (RQ5006)

MACH (2) = 2.950 ALPHA (2) = -3.990 RN/L = 2.5130 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2898	.2849	.2889												
70.000	.3383	.2839	.2671												
80.000	.3928	.2898	.2612												
90.000			.2770	.2177	.2019	.1515	.1356	.1234	.1100	.0966	.0872	.0748	.0633	.0589	.0435
100.000						.1544	.1485	.1366	.1183	.0976	.0852	.0697	.0578	.0501	.0379
110.000						.0717	.0883	.1172	.1245	.0945	.0759	.0622	.0512	.0435	.0335
120.000						.1234								.0214	
130.000						.0728								.0169	
140.000						-.0038								.0147	
150.000						-.0162								-.0007	
160.000						-.0090								-.0062	
170.000						-.0131								-.0007	
180.000						-.0255	-.0183	-.0100	-.0028	.0055	.0086	.0059	.0059	.0059	.0026

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0379	.0324	.0291	.0269	.0247	.0203	.0206	.0165	.0144	.0123	.0144	.0165	.0144	.0186	.0159
100.000	.0302	.0258	.0236	.0214	.0214	.0192	.0196	.0186	.0165	.0144	.0144	.0134	.0144	.0175	.0159
110.000	.0291	.0258	.0214	.0214	.0214	.0136	.0196	.0186	.0186	.0165	.0134	.0134	.0144	.0134	.0128
120.000						.0026								.0165	
130.000						.0217								.0175	
140.000						.0258								.0165	
150.000						.0269								.0144	
160.000						.0279								.0113	
170.000						.0238								.0040	
180.000	.0037	.0070	.0114	.0158	.0158	.0165	.0155	.0134	.0123	.0144	.0144	.0134	.0144	.0009	-.0038

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0417		
70.000							.0531	.0634	.0479
80.000							.0697	.0707	.0531
90.000	.0169	.0096	-.0017	.0045	.0096	.0717	.0738	.0831	.0676
100.000	.0231	.0159	.0159	.0159	.0490	.0862			
110.000	.0200	.0179	.0159	.0417	.1317	.1969			
120.000						.3176			
130.000						.4327			
140.000						.2753			
150.000						.1622			
160.000						.2104			
170.000						.2674			
180.000	.0085	-.0017	-.0059	.0252	.1622	.3609			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(RQ5006)

IA35 ORBITER ASCENT CONFIGURATION

MACH (2) = 2.950 ALPHA (3) = -1.990 RN/L = 2.5130 BETA = -4.0200

SECTION (1)FUSELAGE

DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2778	.2699	.2718												
70.000	.3065	.2699	.2718												
80.000	.3391	.2718	.2560												
90.000			.2669	.2303	.1779	.1284	.1139	.1036	.0882	.0779	.0666	.0563	.0439	.0384	.0264
100.000						.1403	.1304	.1129	.0944	.0799	.0666	.0521	.0406	.0330	.0209
110.000						.1098	.1201	.1139	.0964	.0707	.0542	.0417	.0319	.0253	.0143
120.000						.1078								-.0032	
130.000						.0552								-.0021	
140.000						-.0200								-.0021	
150.000						-.0323								-.0119	
160.000						-.0282								-.0213	
170.000						-.0303								-.0185	
180.000						-.0406	-.0354	-.0292	-.0230	-.0169	-.0127	-.0119	-.0152	-.0152	-.0152

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5990	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0198	.0143	.0111	.0089	.0067	.0034	.0012	-.0023	-.0055	-.0075	-.0055	.0055	-.0055	-.0034	-.0056
100.000	.0143	.0089	.0067	.0045	.0023	.0001	-.0003	-.0023	-.0044	-.0065	-.0065	-.0044	-.0055	-.0034	-.0046
110.000	.0089	.0067	.0001	.0001	-.0021	.0045	-.0013	-.0034	-.0034	-.0055	-.0065	-.0065	-.0044	-.0056	-.0056
120.000						.0045								-.0086	
130.000						-.0065								-.0075	
140.000						-.0013								-.0065	
150.000						.0039								-.0075	
160.000						.0039								-.0086	
170.000						.0028								-.0127	
180.000	-.0119	-.0078	-.0032	-.0021	-.0032	.0023	-.0034	-.0055	-.0075	-.0065	-.0065	-.0055	-.0055	-.0148	-.0158

X/L	.7290	.7470	.7670	.7810	.8030	.8290	.8520	.9000	.9400
PHI									
60.000							.0189		
70.000							.0353	.0425	.0261
80.000							.0537	.0445	.0353
90.000	-.0025	-.0087	-.0107	-.0128	-.0077	.0527	.0639	.0629	.0527
100.000	-.0036	-.0036	-.0025	-.0025	.0363	.0752			
110.000	-.0025	-.0015	.0005	.0261	.1018	.0864			
120.000						.2681			
130.000						.3867			
140.000						.2241			
150.000						.1304			
160.000						.1925			
170.000						.2181			
180.000	-.0048	-.0107	-.0138	-.0046	.1590	.3010			

IA35 ORBITER ASCENT CONFIGURATION (R@5006)

MACH (2) = 2.950 ALPHA (4) = .010 RN/L = 2.5130 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2759	.2620	.2610												
70.000	.2848	.2620	.2610												
80.000	.3026	.2600	.2521												
90.000			.2620	.2274	.1661	.1077	.0911	.0786	.0672	.0558	.0454	.0371	.0279	.0212	.0091
100.000						.1232	.1077	.0890	.0755	.0568	.0454	.0330	.0223	.0157	.0058
110.000						.1253	.1118	.0963	.0765	.0506	.0340	.0212	.0113	.0069	-.0019
120.000						.1056								-.0262	
130.000						.0392								-.0284	
140.000						-.0345								-.0229	
150.000						-.0480								-.0273	
160.000						-.0459								-.0306	
170.000						-.0480								-.0306	
180.000						-.0563	-.0521	-.0469	-.0428	-.0365	-.0334	-.0306	-.0295	-.0284	-.0273

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0036	-.0019	-.0063	-.0097	-.0108	-.0141	-.0163	-.0204	-.0215	-.0225	-.0225	-.0215	-.0225	-.0184	-.0220
100.000	-.0019	-.0075	-.0108	-.0141	-.0163	-.0185	-.0204	-.0204	-.0225	-.0246	-.0225	-.0215	-.0215	-.0225	-.0251
110.000	-.0075	-.0119	-.0163	-.0185	-.0218	-.0108	-.0225	-.0256	-.0256	-.0267	-.0225	-.0225	-.0215	-.0267	-.0271
120.000						-.0063								-.0329	
130.000						-.0298								-.0308	
140.000						-.0267								-.0277	
150.000						-.0194								-.0287	
160.000						-.0173								-.0287	
170.000						-.0173								-.0298	
180.000	-.0251	-.0218	-.0196	-.0196	-.0218	-.0215	-.0215	-.0225	-.0246	-.0267	-.0225	-.0225	-.0215	-.0287	-.0395

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0055		
70.000							.0151	.0285	.0130
80.000							.0419	.0429	.0203
90.000	-.0199	-.0230	-.0240	-.0436	-.0220	.0409	.0563	.0553	.0398
100.000	-.0168	-.0199	-.0220	-.0189	.0192	.0697			
110.000	-.0220	-.0220	-.0220	.0141	.0903	.0893			
120.000						.2557			
130.000						.3414			
140.000						.1768			
150.000						.0790			
160.000						.1522			
170.000						.1689			
180.000	-.0189	-.0240	-.0210	.0048	.1335	.2458			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(RQ5006)

IA35 ORBITER ASCENT CONFIGURATION

MACH (2) = 2.950 ALPHA (5) = 2.010 RN/L = 2.5130 BETA = -4.0200

SECTION (1)FUSELAGE

DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2670	.2452	.2472												
70.000	.2640	.2452	.2492												
80.000	.2700	.2462	.2482												
90.000			.2492	.2363	.1354	.0784	.0628	.0534	.0441	.0357	.0285	.0201	.0117	.0063	-.0047
100.000						.0993	.0847	.0711	.0555	.0309	.0285	.0180	.0074	.0008	-.0091
110.000						.1117	.0972	.0795	.0607	.0337	.0180	.0074	-.0014	-.0069	-.0157
120.000						.1253								-.0454	
130.000						.0264								-.0498	
140.000						-.0486								-.0465	
150.000						-.0611								-.0473	
160.000						-.0611								-.0465	
170.000						-.0632								-.0432	
180.000						-.0705	-.0652	-.0621	-.0580	-.0528	-.0496	-.0465	-.0432	-.0432	-.0377

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6930	.7100
PHI															
80.000	-.0113	-.0157	-.0344	-.0223	-.0245	-.0267	-.0288	-.0319	-.0351	-.0361	-.0351	-.0392	-.0371	-.0361	-.0321
100.000	-.0157	-.0212	-.0245	-.0278	-.0300	-.0333	-.0330	-.0361	-.0371	-.0392	-.0382	-.0382	-.0371	-.0361	-.0370
110.000	-.0223	-.0267	-.0307	-.0344	-.0377	-.0245	-.0413	-.0423	-.0434	-.0444	-.0392	-.0382	-.0361	-.0444	-.0453
120.000						-.0179								-.0548	
130.000						-.0517								-.0529	
140.000						-.0486								-.0496	
150.000						-.0423								-.0475	
160.000						-.0382								-.0455	
170.000						-.0371								-.0423	
180.000	-.0377	-.0377	-.0355	-.0355	-.0377	-.0371	-.0382	-.0392	-.0392	-.0423	-.0382	-.0382	-.0371	-.0382	-.0370

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8520	.9000	.9400
PHI									
80.000							-.0215		
70.000							.0023	.0023	.0013
80.000							.0312	.0312	.0095
90.000	-.0277	-.0308	-.0308	-.0308	-.0298	.0209	.0467	.0436	.0240
100.000	-.0297	-.0298	-.0267	-.0236	-.0018	.0623			
110.000	-.0380	-.0370	-.0298	-.0060	.0788	.0984			
120.000						.2774			
130.000						.3030			
140.000						.1253			
150.000						.0695			
160.000						.1170			
170.000						.1201			
180.000	-.0318	-.0349	-.0298	.0013	.1015	.1985			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

IA35 ORBITER ASCENT CONFIGURATION (RQ5008)

MACH (2) = 2.950 ALPHA (6) = 4.010 RN/L = 2.5130 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2480	.2411	.2225												
70.000	.2420	.2411	.2776												
80.000	.2411	.2223	.2559												
90.000			.2491	.2223	.1085	.0521	.0385	.0291	.0239	.0176	.0124	.0062	-.0003	-.0058	-.0157
100.000						.0772	.0636	.0511	.0385	.0250	.0145	.0041	-.0047	-.0113	-.0212
110.000						.1033	.0835	.0626	.0438	.0197	.0041	-.0047	-.0146	-.0212	-.0289
120.000						.1179								-.0630	
130.000						.0281								-.0685	
140.000						-.0597								-.0663	
150.000						-.0722								-.0619	
160.000						-.0733								-.0608	
170.000						-.0743								-.0586	
180.000						-.0806	-.0774	-.0733	-.0701	-.0659	-.0639	-.0597	-.0564	-.0542	-.0509

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6830	.7100
PHI															
90.000	-.0223	-.0278	-.0322	-.0344	-.0366	-.0378	-.0403	-.0423	-.0444	-.0434	-.0423	-.0475	-.0475	-.0519	-.0514
100.000	-.0267	-.0322	-.0366	-.0399	-.0421	-.0443	-.0455	-.0465	-.0475	-.0486	-.0496	-.0475	-.0455	-.0503	-.0386
110.000	-.0344	-.0399	-.0432	-.0455	-.0498	-.0366	-.0548	-.0559	-.0559	-.0580	-.0486	-.0475	-.0455	-.0542	-.0542
120.000						-.0311								-.0909	
130.000						-.0746								-.0725	
140.000						-.0684								-.0673	
150.000						-.0621								-.0632	
160.000						-.0559								-.0580	
170.000						-.0528								-.0538	
180.000	-.0498	-.0487	-.0476	-.0487	-.0498	-.0496	-.0496	-.0507	-.0496	-.0528	-.0486	-.0475	-.0444	-.0486	-.0490

X/L	.7290	.7470	.7670	.7850	.8030	.8230	.8620	.9000	.9400
PHI									
60.000							-.0334		
70.000							-.0148	.0070	-.0044
80.000							.0205	.0247	.0018
90.000	-.0272	-.0282	-.0314	-.0324	-.0355	-.0333	.0423	.0392	.0164
100.000	-.0293	-.0303	-.0262	-.0293	-.0220	.0527			
110.000	-.0420	-.0423	-.0345	-.0199	.0537	.1077			
120.000						.2791			
130.000						.2850			
140.000						.0869			
150.000						.0496			
160.000						.0516			
170.000						.0703			
180.000	-.0438	-.0459	-.0480	-.0137	.0755	.1600			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(RQ5006)

IA35 ORBITER ASCENT CONFIGURATION

MACH (2) = 2.950 ALPHA (7) = 6.000 RN/L = 2.5130 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4315
PHI															
60.000	.2578	.2225	.2223												
70.000	.2411	.2225	.2657												
80.000	.2233	.2223	.2657												
90.000			.2450	.1996	.0765	.0278	.0143	.0050	.0018	-.0002	-.0054	-.0096	-.0174	-.0207	-.0295
100.000						.0402	.0309	.0247	.0153	.0060	-.0002	-.0096	-.0174	-.0229	-.0324
110.000						.0713	.0568	.0381	.0216	.0010	-.0106	-.0185	-.0273	-.0317	-.0406
120.000						.0973								-.0721	
130.000						.0278								-.0859	
140.000						-.0666								-.0858	
150.000						-.0791								-.0903	
160.000						-.0812								-.0770	
170.000						-.0822								-.0715	
180.000						-.0274	-.0832	-.0801	-.0770	-.0729	-.0697	-.0681	-.0648	-.0648	-.0815

X/L	.4300	.4580	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0350	-.0395	-.0428	-.0461	-.0472	-.0494	-.0509	-.0520	-.0509	-.0488	-.0425	-.0382	-.0513	-.0251	-.0378
100.000	-.0384	-.0428	-.0472	-.0505	-.0516	-.0540	-.0551	-.0572	-.0572	-.0562	-.0541	-.0467	-.0467	-.0241	-.0346
110.000	-.0461	-.0505	-.0538	-.0560	-.0604	-.0483	-.0645	-.0666	-.0666	-.0677	-.0541	-.0467	-.0457	-.0530	-.0427
120.000						-.0428								-.0301	
130.000						-.0960								-.0598	
140.000						-.0897								-.0674	
150.000						-.0792								-.0761	
160.000						-.0698								-.0720	
170.000						-.0658								-.0656	
180.000	-.0604	-.0604	-.0593	-.0604	-.0615	-.0624	-.0635	-.0635	-.0635	-.0645	-.0614	-.0530	-.0457	-.0414	-.0618

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0377		
70.000							-.0283	-.0043	-.0116
80.000							.0041	.0187	-.0012
90.000	-.0231	-.0304	-.0346	-.0356	-.0377	-.0210	.0333	.0365	.0082
100.000	-.0252	-.0294	-.0294	-.0356	-.0336	.0295			
110.000	-.0409	-.0419	-.0398	-.0356	.0135	.1200			
120.000						.2505			
130.000						.2220			
140.000						.0469			
150.000						.0250			
160.000						.0500			
170.000						.0448			
180.000	-.0378	-.0607	-.0607	-.0241	.0490	.1305			

IA35 ORBITER ASCENT CONFIGURATION (RQ5008)

MACH (3) = 4.000 ALPHA (1) = -6.000 RN/L = 3.4990 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0370	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3139	.2465	.2355												
70.000	-.0986	.2475	.2177												
80.000	-.0986	.3180	.2378												
90.000			.2814	.1729	.1063	.0751	.0742	.0830	.0928	.1082	.1170	.1193	.1139	.1096	.1005
100.000						.0807	.0756	.0723	.0677	.0667	.0760	.0961	.1072	.1053	.0985
110.000						.0467	.0453	.0416	.0406	.0453	.0509	.0547	.0648	.0687	.0913
120.000						.1696								.0224	
130.000						.1338								.0008	
140.000						.0565								-.0113	
150.000						.0323								- 0151	
160.000						.0318								-.0151	
170.000						.0318								-.0069	
180.000						.0229	.0150	.0183	.0220	.0085	.0011	-.0040	-.0021	.0008	.0090

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0927	.0884	.0846	.0812	.0812	.0764	.0728	.0676	.0602	.0558	.0528	.0506	.0395	.0491	.0428
100.000	.0937	.0879	.0846	.0836	.0788	.0730	.0669	.0624	.0558	.0513	.0469	.0447	.0395	.0484	.0376
110.000	.0952	.0961	.0889	.0788	.0692	.0373	.0565	.0521	.0491	.0439	.0410	.0380	.0395	.0343	.0318
120.000						.0210								.0439	
130.000						.0269								.0491	
140.000						.0336								.0535	
150.000						.0343								.0521	
160.000						.0328								.0498	
170.000						.0306								.0454	
180.000	.0152	.0200	.0229	.0253	.0263	.0276	.0291	.0313	.0343	.0365	.0395	.0395	.0395	.0387	.0360

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0276		
70.000							.0550	.0750	.0692
80.000							.0871	.0823	.0686
90.000	.0428	.0355	.0344	.0313	.0297	.0755	.0860	.0771	.0807
100.000	.0428	.0371	.0365	.0371	.0571	.0997			
110.000	.0402	.0392	.0423	.0550	.1297	.1271			
120.000						.3943			
130.000						-.0982			
140.000						.3614			
150.000						.2331			
160.000						.1339			
170.000						.2427			
180.000	.0444	.0371	.0318	.0497	.1534	.2374			

IA35 ORBITER ASCENT CONFIGURATION (RQ5006)

MACH (3) = 4.000 ALPHA (2) = -4.000 RN/L = 3.4990 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2870	.2254	.2053												
70.000	.3441	.2432	.2048												
80.000	-.1030	.2052	.2130												
90.000			.2537	.1479	.0911	.0660	.0798	.1023	.1129	.1115	.1063	.1020	.0929	.0890	.0786
100.000						.0660	.0632	.0670	.0764	.0892	.1020	.1001	.0919	.0875	.0791
110.000						.0438	.0409	.0381	.0400	.0442	.0547	.0713	.0851	.0851	.0772
120.000						.1423								.0063	
130.000						.1086								-.0016	
140.000						.0348								-.0016	
150.000						.0187								-.0006	
160.000						.0177								-.0026	
170.000						.0182								-.0070	
180.000						.0106	.0120	.0144	.0158	.0173	.0154	.0097	.0008	-.0051	-.0090

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0757	.0663	.0614	.0570	.0540	.0501	.0479	.0434	.0389	.0366	.0343	.0328	.0200	.0329	.0281
100.000	.0718	.0663	.0604	.0560	.0516	.0471	.0449	.0419	.0381	.0374	.0328	.0321	.0200	.0298	.0243
110.000	.0709	.0649	.0594	.0540	.0486	.0432	.0426	.0396	.0374	.0343	.0298	.0260	.0200	.0298	.0163
120.000						.0368								.0049	
130.000						.0042								.0117	
140.000						.0034								.0185	
150.000						.0095								.0193	
160.000						.0110								.0185	
170.000						.0080								.0162	
180.000	-.0095	-.0080	-.0061	-.0035	-.0016	.0034	.0064	.0087	.0125	.0132	.0147	.0193	.0208	.0132	.0137

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0094		
70.000							.0243	.0435	.0441
80.000							.0563	.0611	.0526
90.000	.0307	.0233	.0142	.0174	.0147	.0494	.0745	.0611	.0542
100.000	.0288	.0253	.0211	.0195	.0323	.0718			
110.000	.0217	.0174	.0206	.0291	.0883	.0958			
120.000						.3338			
130.000						-.1016			
140.000						.2768			
150.000						.1758			
160.000						.0953			
170.000						.2214			
180.000	.0195	.0142	.0110	.0291	.1075	.2209			

IA35 ORBITER ASCENT CONFIGURATION (RQ5006)

MACH (3) = 4.000 ALPHA (3) = -1.980 RN/L = 3.4990 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2833	.2139	.2034												
70.000	.3048	.2199	.1877												
80.000	.3373	.2550	.1948												
90.000			.2276	.1430	.0844	.0763	.0954	.1049	.1001	.0920	.0873	.0820	.0752	.0713	.0604
100.000						.0597	.0644	.0782	.0939	.0932	.0916	.0830	.0747	.0703	.0609
110.000						.0444	.0402	.0406	.0468	.0597	.0778	.0816	.0732	.0673	.0565
120.000						.1192								.0067	
130.000						.0858								-.0090	
140.000						.0168								-.0120	
150.000						.0021								-.0110	
160.000						.0002								-.0120	
170.000						.0002								-.0100	
180.000						-.0051	-.0046	-.0035	-.0027	-.0012	-.0003	-.0026	-.0061	-.0056	-.0046

X/L	.4900	.4680	.4850	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0345	.0481	.0432	.0368	.0358	.0319	.0291	.0255	.0215	.0185	.0170	.0155	.0155	.0147	.0097
100.000	.0330	.0471	.0417	.0373	.0333	.0289	.0268	.0238	.0208	.0178	.0147	.0125	.0140	.0110	.0069
110.000	.0498	.0442	.0393	.0333	.0289	.0353	.0223	.0185	.0162	.0132	.0110	.0095	.0110	.0057	.0028
120.000						.0393								.0057	
130.000						.0072								-.0071	
140.000						.0064								-.0056	
150.000						.0072								-.0034	
160.000						.0042								-.0034	
170.000						-.0034								-.0049	
180.000	-.0091	-.0048	-.0036	-.0026	-.0075	-.0086	-.0071	-.0056	-.0049	-.0034	-.0034	.0057	.0087	-.0056	-.0068

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0057		
70.000							.0092	.0246	.0241
80.000							.0305	.0357	.0305
90.000	.0119	.0155	.0025	-.0109	-.0009	.0214	.0497	.0438	.0393
100.000	.0119	.0065	.0045	.0[illegible]	.0172	.0539			
110.000	.0075	.0044	.0060	.014[illegible]	.0662	.0789			
120.000						.2715			
130.000						.3713			
140.000						.2013			
150.000						.1072			
160.000						.0848			
170.000						.1694			
180.000	-.0014	-.0068	-.0110	.0750	.0672	.2515			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063)

(RQ5006)

IA35 ORBITER ASCENT CONFIGURATION

MACH (3) = 4.005 ALPHA (4) = .010 RN/L = 3.4990 BETA = -4.0200

SECTION (4)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2415	.2057	.1882												
70.000	.2761	.2053	.1682												
80.000	.2971	.2290	.1815												
90.000			.2085	.1386	.0914	.0857	.0895	.0866	.0823	.0771	.0714	.0656	.0582	.0543	.0449
100.000						.0599	.0723	.0890	.0933	.0833	.0747	.0666	.0577	.0528	.0434
110.000						.0456	.0428	.0475	.0628	.0766	.0742	.0641	.0538	.0464	.0385
120.000						.1000								.0015	
130.000						.0666								-.0222	
140.000						.0022								-.0212	
150.000						-.0111								-.0212	
160.000						-.0144								-.0202	
170.000						-.0144								-.0212	
180.000						-.0187	-.0183	-.0183	-.0178	-.0168	-.0149	-.0163	-.0163	-.0187	-.0197

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0390	.0315	.0286	.0237	.0207	.0173	.0143	.0105	.0075	.0052	.0022	.0007	-.0016	-.0001	-.0053
100.000	.0375	.0311	.0257	.0212	.0178	.0133	.0105	.0090	.0052	.0029	-.0001	-.0024	-.0016	-.0039	-.0080
110.000	.0321	.0271	.0227	.0178	.0133	.0227	.0059	.0029	.0007	-.0016	-.0039	-.0061	-.0031	-.0107	-.0173
120.000						.0281								-.0235	
130.000						-.0145								-.0205	
140.000						-.0122								-.0160	
150.000						-.0122								-.0129	
160.000						-.0092								-.0114	
170.000						-.0034								-.0152	
180.000	-.0192	-.0176	-.0163	-.0138	-.0123	-.0114	-.0107	-.0092	-.0107	-.0099	-.0107	.0092	-.0031	-.0160	-.0176

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0165		
70.000							-.0032	.0143	.0133
80.000							.0191	.0234	.0154
90.000	-.0011	-.0069	-.0096	-.0122	-.0160	.0069	.0329	.0271	.0265
100.000	-.0021	-.0064	-.0069	-.0085	-.0005	.0303			
110.000	-.0085	-.0069	-.0069	.0032	.0404	.0754			
120.000						.2168			
130.000						.3189			
140.000						.1562			
150.000						.0584			
160.000						.0569			
170.000						.1158			
180.000	-.0194	-.0207	-.0239	-.0185	.0404	.2168			

IA35 ORBITER ASCENT CONFIGURATION (RQ5006)

MACH (3) = 4.000 ALPHA (5) = 2.000 RN/L = 3.4990 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4510
PHI															
60.000	.2278	.2014	.1813												
70.000	.2474	1978	.1732												
80.000	.2602	.2087	.1747												
90.000			.1037	.1385	.0971	.0814	.0795	.0762	.0696	.0619	.0558	.0491	.0414	.0374	.0280
100.000						.0629	.0810	.0857	.0791	.0677	.0586	.0505	.0409	.0359	.0261
110.000						.0496	.0501	.0634	.0795	.0696	.0586	.0468	.0359	.0305	.0207
120.000						.0833								-.0070	
130.000						.0505								-.0277	
140.000						-.0009								-.0316	
150.000						-.0218								-.0296	
160.000						-.0260								-.0296	
170.000						-.0260								-.0296	
180.000						-.0294	-.0294	-.0294	-.0289	-.0284	-.0279	-.0286	-.0282	-.0282	-.0282

X/L	.4590	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
60.000	.0231	.0182	.0137	.0103	.0078	.0039	.0011	-.0020	-.0058	-.0088	-.0111	-.0118	-.0126	-.0126	-.0160
70.000	.0202	.0152	.0109	.0073	.0038	.0004	-.0020	-.0050	-.0073	-.0103	-.0126	-.0149	-.0125	-.0164	-.0181
80.000	.0147	.0103	.0064	.0024	-.0010	.0103	-.0080	-.0111	-.0126	-.0156	-.0171	-.0194	-.0141	-.0225	-.0234
90.000						.0162								-.0422	
100.000						-.0293								-.0392	
110.000						-.0325								-.0346	
120.000						-.0278								-.0316	
130.000						-.0278								-.0293	
140.000						-.0240								-.0285	
150.000	-.0291	-.0232	-.0262	-.0242	-.0237	-.0240	-.0232	-.0240	-.0240	-.0247	-.0255	-.0187	-.0141	-.0293	-.0277

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0245		
70.000							-.0144	.0060	.0084
80.000							.0058	.0164	.0158
90.000	-.0112	-.0160	-.0187	-.0208	-.0208	-.0075	.0222	.0201	.0222
100.000	-.0134	-.0150	-.0171	-.0192	-.0134	.0143			
110.000	-.0192	-.0224	-.0176	-.0134	.0148	.0610			
120.000						.1863			
130.000						.2464			
140.000						.1013			
150.000						.0233			
160.000						.0679			
170.000						.0700			
180.000	-.0213	-.0250	-.0282	-.0208	.0350	.1604			

IA35 ORBITER ASCENT CONFIGURATION (RQ5006)

MACH (3) = 4.000 ALPHA (6) = 4.010 RN/L = 3.4990 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2123	.1903	.1894												
70.000	.2215	.1875	.1608												
80.000	.2256	.1899	.1622												
90.000			.1765	.1389	.1027	.0779	.0689	.0527	.0546	.0460	.0393	.0336	.0264	.0229	.0150
100.000						.0765	.0765	.0722	.0646	.0536	.0436	.0346	.0244	.0199	.0125
110.000						.0551	.0708	.0789	.0693	.0527	.0408	.0289	.0189	.0140	.0050
120.000						.0679								-.0218	
130.000						.0341								-.0307	
140.000						-.0212								-.0446	
150.000						-.0326								-.0411	
160.000						-.0364								-.0396	
170.000						-.0369								-.0401	
180.000						-.0397	-.0397	-.0397	-.0397	-.0393	-.0388	-.0406	-.0396	-.0386	-.0382

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
60.000	.0100	.0050	.0011	-.0024	-.0054	-.0084	-.0096	-.0119	-.0149	-.0172	-.0187	-.0194	-.0202	-.0194	-.0241
70.000	.0070	.0026	-.0014	-.0049	-.0079	-.0113	-.0119	-.0142	-.0172	-.0187	-.0209	-.0232	-.0202	-.0230	-.0273
80.000	.0001	-.0039	-.0074	-.0103	-.0138	-.0124	-.0172	-.0202	-.0217	-.0239	-.0254	-.0277	-.0217	-.0307	-.0345
90.000						.0065								-.0540	
100.000						-.0427								-.0517	
110.000						-.0405								-.0495	
120.000						-.0374								-.0457	
130.000						-.0367								-.0420	
140.000						-.0352								-.0397	
150.000	-.0372	-.0357	-.0362	-.0352	-.0357	-.0329	-.0329	-.0344	-.0344	-.0344	-.0344	-.0329	-.0232	-.0382	-.0375

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0263		
70.000							-.0177	-.0006	.0015
80.000							-.0006	.0148	.0111
90.000	-.0199	-.0247	-.0289	-.0279	-.0260	-.0140	.0196	.0245	.0175
100.000	-.0225	-.0252	-.0284	-.0273	-.0247	.0026			
110.000	-.0295	-.0327	-.0289	-.0273	-.0044	.0565			
120.000						.1718			
130.000						.1831			
140.000						.0528			
150.000						.0020			
160.000						.0303			
170.000						.0303			
180.000	-.0343	-.0364	-.0375	-.0236	.0180	.0848			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(RQ5006)

IA35 ORBITER ASCENT CONFIGURATION

MACH (3) = 4.000 ALPHA (7) = 6.000 RN/L = 3.4990 BETA = -4.0200

SECTION (1)FUSELAGE

DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1982	.1708	.1746												
70.000	.2023	.1746	.1584												
80.000	.1364	.1746	.1498												
90.000			.1593	.1487	.0955	.0693	.0574	.0470	.0355	.0293	.0250	.0203	.0147	.0118	.0054
100.000						.0703	.0636	.0570	.0493	.0389	.0303	.0235	.0162	.0118	.0044
110.000						.0684	.0712	.0655	.0541	.0379	.0255	.0167	.0083	.0044	-.0020
120.000						.0627								-.0316	
130.000						.0227								-.0380	
140.000						-.0302								-.0429	
150.000						-.0402								-.0474	
160.000						-.0445								-.0449	
170.000						-.0445								-.0449	
180.000						-.0469	-.0469	-.0469	-.0474	-.0469	-.0464	-.0454	-.0449	-.0449	-.0429

X/L	.4500	.4690	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6920	.7100
PHI															
60.000	.0084	-.0040	-.0070	-.0104	-.0129	-.0198	-.0202	-.0225	-.0263	-.0270	-.0278	-.0285	-.0285	-.0279	-.0301
70.000	-.0005	-.0050	-.0084	-.0114	-.0148	-.0183	-.0217	-.0240	-.0270	-.0293	-.0308	-.0323	-.0285	-.0331	-.0337
80.000	-.0070	-.0069	-.0134	-.0158	-.0198	-.0304	-.0278	-.0301	-.0323	-.0346	-.0361	-.0369	-.0285	-.0389	-.0376
90.000						-.0525								-.0665	
100.000						-.0574								-.0642	
110.000						-.0586								-.0619	
120.000						-.0536								-.0612	
130.000						-.0491								-.0574	
140.000						-.0458								-.0523	
150.000						-.0437	-.0452	-.0467	-.0468	-.0475	-.0475	-.0460	-.0369	-.0490	-.0450
160.000															
170.000	-.0425	-.0410	-.0455	-.0402	-.0410										
180.000															

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0307		
70.000							-.0221	-.0088	-.0045
80.000							-.0083	.0088	.0072
90.000	-.0248	-.0291	-.0243	-.0195	-.0200	-.0168	.0141	.0200	.0152
100.000	-.0275	-.0301	-.0302	-.0232	-.0173	.0029			
110.000	-.0333	-.0376	-.0371	-.0317	-.0045	.0819			
120.000						.1655			
130.000						.1522			
140.000						.0162			
150.000						-.0184			
160.000						-.0072			
170.000						-.0189			
180.000	-.0429	-.0440	-.0429	-.0344	-.0056	.0663			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(R05006)

IA35 ORBITER ASCENT CONFIGURATION

MACH (4) = 4.500 ALPHA (1) = -6.000 RN/L = 3.5030 BETA = -4.0200

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3271	.2491	.2184												
70.000	.3986	.2748	.2202												
80.000	.4497	.3320	.2404												
90.000			.2908	.1791	.1028	.0739	.0711	.0763	.0832	.0890	.0959	.1023	.1040	.1022	.0939
100.000						.0838	.0739	.0711	.0659	.0624	.0664	.0728	.0820	.0850	.0903
110.000						.0578	.0526	.0485	.0445	.0422	.0468	.0488	.0500	.0523	.0660
120.000						.1687								.0120	
130.000						.1317								-.0053	
140.000						.0491								-.0159	
150.000						.0185								-.0189	
160.000						.0144								-.0189	
170.000						.0156								-.0142	
180.000						.0121	.0208	.0190	.0069	-.0023	-.0075	-.0118	-.0106	-.0076	.0019
X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5300	.5980	.6170	.6360	.6540	.6730	.6680	.7100
PHI															
80.000	.0903	.0856	.0820	.0796	.0790	.0767	.0743	.0690	.0637	.0602	.0558	.0531	.0513	.0505	.0373
90.000	.0868	.0844	.0832	.0826	.0784	.0731	.0699	.0637	.0593	.0540	.0505	.0460	.0443	.0425	.0334
100.000	.0820	.0391	.0838	.0767	.0642	.0612	.0584	.0531	.0487	.0443	.0407	.0372	.0346	.0310	.0229
110.000						.0458								.0195	
120.000						.0036								.0407	
130.000						-.0096								.0460	
140.000						.0204								.0478	
150.000						.0222								.0469	
160.000						.0257								.0425	
170.000						.0275	.0284	.0301	.0310	.0328	.0354	.0363	.0372	.0372	.0314
180.000	.0084	.0143	.0191	.0226	.0250	.0290	.8620	.9000	.9400						
X/L	.7290	.7470	.7670	.7850	.8030										
PHI															
60.000							.0229								
70.000							.0373	.0602	.0621						
80.000							.0733	.0778	.0693						
90.000	.0408	.0334	.0295	.0268	.0242	.0641	.0863	.0759	.0680						
100.000	.0367	.0308	.0308	.0288	.0484	.0883									
110.000	.0288	.0249	.0268	.0510	.1092	.1157									
120.000						.3732									
130.000						-.1039									
140.000						.3261									
150.000						.2158									
160.000						.1288									
170.000						.2131									
180.000	.0393	.0340	.0308	.0380	.1282	.2112									

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1083) (RQ5006)

IA35 ORBITER ASCENT CONFIGURATION

MACH (4) = 4.500 ALPHA (2) = -3.990 RN/L = 3.5030 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2924	.2222	.2006												
90.000	.3518	.2437	.1942												
80.000	.3909	.2913	.2122												
90.000			.2583	.1615	.0840	.0601	.0659	.0793	.0933	.0980	.0985	.0980	.0912	.0882	.0786
100.000						.0582	.0630	.0612	.0624	.0671	.0741	.0811	.0870	.0852	.0804
110.000						.0542	.0472	.0437	.0414	.0397	.0437	.0510	.0582	.0636	.0750
120.000						.1481								.0031	
130.000						.1172								-.0047	
140.000						.0426								-.0053	
150.000						.0269								-.0009	
160.000						.0227								-.0142	
170.000						.0004								-.0155	
180.000						.0146	.0128	.0105	.0047	.0047	.0012	-.0065	-.0124	-.0154	-.0172

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0744	.0690	.0624	.0618	.0588	.0552	.0541	.0497	.0461	.0416	.0399	.0372	.0381	.0372	.0257
100.000	.0750	.0696	.0648	.0612	.0576	.0520	.0505	.0479	.0452	.0434	.0399	.0363	.0336	.0314	.0257
110.000	.0728	.0684	.0636	.0582	.0588	.0401	.0487	.0452	.0408	.0363	.0327	.0283	.0265	.0229	.0165
120.000						.0481								-.0073	
130.000						-.0055								-.0029	
140.000						-.0073								.0105	
150.000						-.0038								.0157	
160.000						-.0011								.0167	
170.000						.0037								.0167	
180.000	-.0160	-.0130	-.0100	-.0059	-.0029	.0017	.0034	.0060	.0087	.0114	.0123	.0131	.0140	.0140	.0139

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9430
PHI							.0094		
80.000							.0185	.0334	.0496
90.000							.0406	.0562	.0536
80.000							.0692	.0666	.0549
90.000	.0334	.0263	.0243	.0211	.0165	.0328			
100.000	.0289	.0258	.0243	.0211	.0282	.0685			
110.000	.0224	.0139	.0107	.0269	.0633	.0938			
120.000						.3057			
130.000						.4171			
140.000						.2401			
150.000						.1478			
160.000						.0919			
170.000						.1939			
180.000	.0191	.0152	.0133	.0289	.0922	.2102			

IA35 ORBITER ASCENT CONFIGURATION (RQ50D6)

MACH (4) = 4.500 ALPHA (3) = -2.000 RN/L = 3.5030 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2849	.2022	.1900												
70.000	.3122	.2203	.1795												
80.000	.3478	.2394	.1894												
90.000			.2297	.1456	.0726	.0620	.0720	.0848	.0907	.0819	.0854	.0819	.0756	.0714	.0630
100.000						.0550	.0550	.0609	.0702	.0755	.0819	.0813	.0756	.0714	.0642
110.000						.0492	.0428	.0404	.0404	.0416	.0486	.0570	.0654	.0672	.0612
120.000						.1228								-.0035	
130.000						.0930								-.0077	
140.000						.0252								-.0077	
150.000						.0139								-.0077	
160.000						.0071								-.0071	
170.000						.0066								-.0071	
180.000						.0031	.0025	.0025	.0007	.0019	.0025	.0013	-.0047	-.0047	-.0053

X/L	.4300	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6280	.7100
PHI															
90.000	.0582	.0522	.0487	.0439	.0403	.0361	.0348	.0312	.0277	.0250	.0223	.0214	.0205	.0205	.0112
100.000	.0588	.0528	.0481	.0433	.0397	.0355	.0330	.0294	.0268	.0232	.0205	.0169	.0161	.0134	.0079
110.000	.0552	.0504	.0457	.0409	.0433	.0307	.0286	.0250	.0223	.0196	.0169	.0143	.0125	.0134	.0033
120.000						.0397								-.0063	
130.000						.0044								-.0143	
140.000						.0044								-.0134	
150.000						-.0143								-.0081	
160.000						-.0134								-.0045	
170.000						-.0134								-.0045	
180.000	-.0100	-.0166	-.0190	-.0184	-.0172	-.0143	-.0125	-.0098	-.0081	-.0054	-.0045	-.0045	-.0036	-.0045	-.0058

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0065		
70.000							.0014	.0177	.0229
80.000							.0216	.0334	.0275
90.000	.0184	.0118	.0092	.0039	.0033	.0144	.0465	.0517	.0412
100.000	.0125	.0105	.0118	.0099	.0151	.0523			
110.000	.0085	.0059	.0079	.0203	.0536	.0909			
120.000						.2327			
130.000						.3184			
140.000						.1654			
150.000						.0765			
160.000						.0818			
170.000						.1340			
180.000	-.0019	-.0045	-.0078	.0085	.0419	.2184			

IA35 ORBITER ASCENT CONFIGURATION (R05006)

MACH (4) = 4.500 ALPHA (4) = .010 RN/L = 3.5030 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1200	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2594	.1831	.1758												
90.000	.2785	.1985	.1659												
100.000	.2971	.2289	.1711												
110.000			.2038	.1343	.0725	.0666	.0771	.0783	.0777	.0672	.0690	.0655	.0592	.0556	.0478
120.000						.0468	.0544	.0666	.0760	.0789	.0748	.0684	.0604	.0574	.0490
130.000						.0469	.0392	.0404	.0444	.0514	.0596	.0634	.0592	.0544	.0454
140.000						.0090								-.0045	
150.000						.0719								-.0171	
160.000						.0100								-.0165	
170.000						-.0023								-.0165	
180.000						-.0063								-.0165	
						-.0069								-.0147	
						-.0089	-.0110	-.0110	-.0116	-.0116	-.0110	-.0117	-.0123	-.0135	-.0171

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6890	.7170
PHI															
90.000	.0442	.0394	.0346	.0316	.0280	.0239	.0231	.0187	.0151	.0124	.0106	.0080	.0080	.0080	-.0005
100.000	.0430	.0375	.0322	.0274	.0232	.0190	.0169	.0142	.0124	.0106	.0080	.0062	.0035	.0035	-.0011
110.000	.0400	.0346	.0292	.0244	.0274	.0154	.0133	.0097	.0062	.0035	.0008	-.0010	-.0010	-.0035	-.0067
120.000						.0226								-.0188	
130.000						-.0031								-.0179	
140.000						-.0027								-.0143	
150.000						-.0143								-.0117	
160.000						-.0117								-.0134	
170.000						-.0093								-.0168	
180.000	-.0171	-.0165	-.0159	-.0147	-.0135	-.0126	-.0109	-.0099	-.0081	-.0099	-.0126	-.0143	-.0152	-.0161	-.0174

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0129		
90.000							-.0051	.0072	.0131
100.000							.0098	.0202	.0163
110.000	.0059	.0007	-.0031	-.0057	-.0070	.0014	.0293	.0290	.0228
120.000	.0040	.0014	.0001	-.0025	-.0044	.0054			
130.000	-.0025	-.0051	-.0038	-.0006	.0254	.0837			
140.000						.2127			
150.000						.2771			
160.000						.1190			
170.000						.0305			
180.000						.0655			
						.0804			
	-.0155	-.0168	-.0187	-.0044	.0318	.1699			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(RQ5006)

IA35 ORBITER ASCENT CONFIGURATION

MACH (4) = 4.500 ALPHA (5) = 2.000 RN/L = 3.5030 BETA = -4.0200

SECTION (1)FUSELAGE

DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2193	.1784	.1587												
70.000	.2469	.1805	.1534												
80.000	.2592	.2034	.1552												
90.000			.1805	.1252	.0794	.0676	.0664	.0647	.0605	.0594	.0588	.0558	.0478	.0430	.0340
100.000						.0476	.0611	.0694	.0717	.0664	.0600	.0523	.0448	.0406	.0327
110.000						.0400	.0376	.0435	.0558	.0611	.0594	.0515	.0418	.0376	.0273
120.000						.0788								-.0047	
130.000						.0523								-.0313	
140.000						-.0041								-.0271	
150.000						-.0147								-.0258	
160.000						-.0194								-.0258	
170.000						-.0206								-.0258	
180.000						-.0265	-.0229	-.0241	-.0247	-.0247	-.0247	-.0246	-.0246	-.0252	-.0246

X/L	.4500	.4680	.4850	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6920	.7100
PHI															
90.000	.0291	.0237	.0201	.0158	.0134	.0098	.0077	.0050	.0014	-.0013	-.0031	-.0049	-.0058	-.0058	-.0118
100.000	.0279	.0225	.0182	.0140	.0104	.0068	.0050	.0014	-.0013	-.0031	-.0058	-.0067	-.0085	-.0105	-.0124
110.000	.0213	.0152	.0110	.0062	.0140	.0001	-.0004	-.0031	-.0040	-.0067	-.0085	-.0112	-.0130	-.0149	-.0168
120.000						.0080								-.0364	
130.000						-.0238								-.0364	
140.000						-.0157								-.0337	
150.000						-.0256								-.0301	
160.000						-.0256								-.0283	
170.000						-.0238								-.0256	
180.000	-.0265	-.0271	-.0265	-.0258	-.0252	-.0238	-.0238	-.0229	-.0229	-.0211	-.0229	-.0229	-.0238	-.0247	-.0242

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0235		
70.000							-.0157	-.0052	-.0020
80.000							-.0013	.0065	.0078
90.000	-.0072	-.0098	-.0144	-.0163	-.0189	-.0085	.0111	.0144	.0118
100.000	-.0091	-.0118	-.0131	-.0150	-.0111	.0078			
110.000	-.0150	-.0183	-.0183	-.0098	.0065	.0516			
120.000						.1744			
130.000						.2156			
140.000						.0797			
150.000						.0144			
160.000						.0444			
170.000						.0451			
180.000	-.0203	-.0229	-.02	-.0150	.0157	.1169			

IA35 ORBITER ASCENT CONFIGURATION (RQ5008)

MACH (4) = 4.500 ALPHA (6) = 4.010 RN/L = 5.5030 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2054	.1771	.1446												
70.000	.2166	.1741	.1470												
80.000	.2189	.1812	.1494												
90.000			.1641	.1228	.0798	.0674	.0639	.0592	.0550	.0491	.0421	.0368	.0292	.0201	.0176
100.000						.0580	.0609	.0615	.0597	.0533	.0468	.0385	.0298	.0235	.0170
110.000						.0379	.0450	.0544	.0597	.0509	.0432	.0340	.0249	.0207	.0122
120.000						.0621								-.0140	
130.000						.0350								-.0280	
140.000						-.0145								-.0377	
150.000						-.0252								-.0353	
160.000						-.0293								-.0347	
170.000						-.0305								-.0347	
180.000						-.0322	-.0328	-.0334	-.0346	-.0346	-.0346	-.0347	-.0347	-.0347	-.0341

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6980	.7190
PHI															
90.000	.0140	.0037	.0061	.0033	.0006	-.0030	-.0048	-.0075	-.0102	-.0120	-.0138	-.0165	-.0165	-.0174	-.0173
100.000	.0115	.0079	.0042	.0006	-.0018	-.0049	-.0075	-.0084	-.0111	-.0138	-.0165	-.0174	-.0192	-.0201	-.0193
110.000	.0067	.0018	-.0018	-.0049	-.0024	-.0110	-.0120	-.0138	-.0165	-.0183	-.0192	-.0219	-.0228	-.0255	-.0257
120.000						-.0103								-.0480	
130.000						-.0372								-.0471	
140.000						-.0309								-.0444	
150.000						-.0354								-.0435	
160.000						-.0336								-.0398	
170.000						-.0345								-.0380	
180.000	-.0333	-.0328	-.0322	-.0328	-.0328	-.0327	-.0327	-.0336	-.0345	-.0345	-.0345	-.0345	-.0354	-.0354	-.0350

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0300		
70.000							-.0227	-.0101	-.0061
80.000							-.0127	.0026	.0059
90.000	-.0207	-.0240	-.0260	-.0287	-.0293	-.0214	.0026	.0125	.0125
100.000	-.0234	-.0254	-.0260	-.0267	-.0260	-.0081			
110.000	-.0287	-.0320	-.0313	-.0273	-.0114	.0378			
120.000						.1448			
130.000						.1528			
140.000						.0298			
150.000						-.0107			
160.000						-.0014			
170.000						-.0067			
180.000	-.0406	-.0373	-.0333	-.0260	-.0074	.0511			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1033) (R05006)

IA35 ORBITER ASCENT CONFIGURATION

MACH (4) = 4.500 ALPHA (7) = 6.010 RN/L = 3.5030 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1898	.1631	.1513												
90.000	.1925	.1613	.1390												
80.000	.1884	.1631	.1354												
90.000			.1448	.1225	.0825	.0607	.0577	.0519	.0419	.0336	.0289	.0236	.0175	.0144	.0071
100.000						.0630	.0583	.0542	.0501	.0419	.0348	.0283	.0205	.0156	.0084
110.000						.0554	.0566	.0548	.0489	.0395	.0295	.0199	.0126	.0108	.0029
120.000						.0530								-.0250	
130.000						.0024								-.0317	
140.000						-.0223								-.0390	
150.000						-.0317								-.0420	
160.000						-.0358								-.0396	
170.000						-.0370								-.0390	
180.000						-.0382	-.0399	-.0394	-.0399	-.0405	-.0399	-.0396	-.0390	-.0390	-.0384

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6860	.7100
PHI															
90.000	.0047	.0005	-.0032	-.0062	-.0086	-.0117	-.0129	-.0147	-.0174	-.0192	-.0210	-.0210	-.0219	-.0224	-.0260
100.000	.0035	.0005	-.0032	-.0068	-.0092	-.0129	-.0138	-.0165	-.0183	-.0210	-.0228	-.0246	-.0255	-.0264	-.0290
110.000	-.0014	-.0056	-.0080	-.0117	-.0092	-.0177	-.0183	-.0210	-.0237	-.0255	-.0264	-.0282	-.0291	-.0300	-.0352
120.000						-.0171								-.0471	
130.000						-.0471								-.0462	
140.000						-.0399								-.0462	
150.000						-.0453								-.0453	
160.000						-.0435								-.0453	
170.000						-.0399								-.0453	
180.000	-.0378	-.0372	-.0378	-.0384	-.0390	-.0390	-.0390	-.0390	-.0399	-.0408	-.0426	-.0426	-.0426	-.0426	-.0478

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0280		
90.000							-.0202	-.0136	-.0091
80.000							-.0091	.0007	.0047
90.000	-.0215	-.0281	-.0274	-.0267	-.0202	-.0117	.0160	.0145	.0125
100.000	-.0248	-.0281	-.0274	-.0274	-.0221	.0014			
110.000	-.0293	-.0326	-.0320	-.0274	- 0130	.0374			
120.000						.1289			
130.000						.1296			
140.000						.0079			
150.000						-.0235			
160.000						-.0241			
170.000						-.0320			
180.000	-.0424	-.0405	-.0392	-.0372	-.0333	.0191			

IA35 ORBITER ASCENT CONFIGURATION (RQ5007) (03 JAN 74)

REFERENCE DATA

PARAMETRIC DATA

SREF = .0000 SQ.IN. XMRP = .0000 IN. BETA = -6.000 ELEVON = .000
LREF = .0000 IN. YMRP = .0000 IN.
BREF = .0000 IN. ZMRP = .0000 IN.
SCALE = .0150 SCALE

MACH (1) = 2.500 ALPHA (1) = -5.970 RN/L = 2.5010 BETA = -5.9600

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3733	.4311	.4408												
70.000	.4062	.4204	.4017												
80.000	.4459	.4035	.4444												
90.000			.4488	.4097	.2320	.1555	.1386	.1280	.1120	.0915	.0835	.0764	.0646	.0603	.0474
100.000						.1715	.1502	.1342	.1102	.0898	.0755	.0604	.0526	.0449	.0389
110.000						.1538	.1369	.1226	.1058	.0764	.0587	.0483	0414	.0380	.0363
120.000						.2151								.0397	
130.000						.1075								.0389	
140.000						-.0007								.0329	
150.000						-.0098								.0215	
160.000						-.0034								.0215	
170.000						-.0125								.0215	
180.000						-.0307	-.0179	-.0034	.0129	.0229	.0284	.0243	.0234	.0243	.0205

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0449	.0431	.0431	.0431	.0457	.0414	.0400	.0364	.0355	.0364	.0488	.0674	.0807	.0834	.0840
100.000	.0389	.0397	.0414	.0431	.0431	.0440	.0400	.0391	.0382	.0373	.0490	.0524	.0736	.0789	.0822
110.000	.0397	.0423	.0397	.0397	.0414	.0282	.0426	.0417	.0400	.0391	.0400	.0400	.0612	.0612	.0778
120.000						.0119								.0490	
130.000						.0364								.0347	
140.000						.0382								.0311	
150.000						.0391								.0256	
160.000						.0338								.0202	
170.000						.0265								.0074	
180.000	.0215	.0234	.0253	.0224	.0186	.0183	.0174	.0147	.0110	.0092	.0074	.0183	.0238	-.0026	-.0099

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.1043		
70.000							.1157	.1122	.0999
80.000							.1466	.1122	.0902
90.000	.0717	.0811	.0549	.0567	.0708	.1501	.1589	.1237	.0937
100.000	.0875	.0734	.0725	.0673	.1439	.1801			
110.000	.0798	.0743	.0814	.1025	.2286	.2109			
120.000						.4225			

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (1) = 2.500 ALPHA (1) = -5.970

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
130.000						.5529			
140.000						.3176			
150.000						.1810			
160.000						.2497			
170.000						.3096			
180.000	.0058	-.0081	-.0154	-.0044	.2162	.3837			

MACH (2) = 2.500 ALPHA (2) = -4.010 RN/L = 2.5010 BETA = -5.9600

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3817	.4275	.4044												
70.000	.3822	.4071	.4355												
80.000	.4133	.4071	.4355												
90.000			.4328	.3644	.2026	.1315	.1147	.1049	.0942	.0800	.0693	.0587	.0483	.0440	.0329
100.000						.1475	.1315	.1173	.0960	.0738	.0604	.0462	.0380	.0320	.0243
110.000						.1449	.1244	.1075	.0871	.0569	.0427	.0329	.0252	.0185	.0166
120.000						.1964								.0021	
130.000						.0898								.0098	
140.000						-.0136								.0069	
150.000						-.0263								-.0037	
160.000						-.0227								-.0105	
170.000						-.0318								-.0066	
180.000						-.0509	-.0400	-.0263	-.0126	-.0083	-.0017	-.0018	-.0018	-.0056	-.0027

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0281	.0243	.0233	.0214	.0214	.0194	.0192	.0136	.0136	.0182	.0247	.0364	.0523	.0594	.0584
100.000	.0204	.0137	.0175	.0204	.0185	.0166	.0191	.0182	.0164	.0146	.0182	.0237	.0470	.0497	.0531
110.000	.0127	.0137	.0166	.0175	.0185	.0223	.0173	.0182	.0191	.0164	.0173	.0219	.0435	.0311	.0478
120.000						.0194								.0100	
130.000						.0054								.0100	
140.000						.0081								.0045	
150.000						.0081								.0008	
160.000						.0072								-.0075	
170.000						.0017								-.0157	
180.000	-.0027	.0001	.0001	-.0018	-.0037	-.0047	-.0047	-.0093	-.0111	-.0139	-.0176	-.0010	-.0001	-.0240	-.0307

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (1) = 2.500 ALPHA (2) = -4.010

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0804		
70.000							.0910	.0839	.0698
80.000							.1191	.0874	.0672
90.000	.0470	.0364	.0320	.0338	.0452	.1200	.1332	.1015	.0725
100.000	.0602	.0487	.0470	.0443	.1130	.1508			
110.000	.0584	.0559	.0549	.0913	.1992	.1816			
120.000						.4007			
130.000						.5081			
140.000						.2625			
150.000						.1376			
160.000						.2141			
170.000						.2608			
180.000	-.0170	-.0270	-.0343	-.0107	.1825	.3277			

MACH (1) = 2.500 ALPHA (3) = -1.950 RN/L = 2.5010 BETA = -5.9600

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3442	.4801	.3727												
70.000	.3531	.4099	.4011												
80.000	.3744	.3931	.4348												
90.000			.4437	.3247	.1712	.1081	.0966	.0811	.0771	.0638	.0513	.0416	.0318	.0270	.0125
100.000						.1268	.1126	.0975	.0789	.0611	.0478	.0345	.0222	.0164	.0057
110.000						.1259	.1090	.0914	.0726	.0451	.0309	.0212	.0087	.0029	-.0019
120.000						.1774								-.0309	
130.000						.0744								-.0261	
140.000						-.0358								-.0203	
150.000						-.0449								-.0280	
160.000						-.0449								-.0367	
170.000						-.0449								-.0357	
180.000						-.0678	-.0577	-.0468	-.0367	-.0312	-.0267	-.0261	-.0270	-.0289	-.0280

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0096	.0048	.0029	.0010	.0010	-.0019	-.0033	-.0051	-.0070	-.0033	.0032	.0097	.0263	.0371	.0353
100.000	.0010	-.0019	-.0039	-.0039	-.0029	-.0068	-.0033	-.0051	-.0051	-.0051	-.0014	.0023	.0226	.0253	.0336
110.000	-.0077	-.0106	-.0097	-.0077	-.0116	.0059	-.0060	-.0051	-.0070	-.0051	-.0079	-.0042	.0207	.0160	.0219
120.000						.0106								-.0162	
130.000						-.0236								-.0208	
140.000						-.0227								-.0208	
150.000						-.0190								-.0254	

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (1) = 2.500 ALPHA (3) = -1.950

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
160.000						-.0199								-.0291	
170.000						-.0245								-.0384	
180.000	-.0281	-.0270	-.0261	-.0261	-.0270	-.0282	-.0301	-.0319	-.0347	-.0365	-.0384	-.0245	-.0107	-.0439	-.0486

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0565		
70.000							.0697	.0626	.0521
80.000							.0978	.0670	.0450
90.000	.0272	.0172	.0108	.0099	.0254	.1040	.1146	.0635	.0512
100.000	.0380	.0254	.0227	.0227	.0961	.1269			
110.000	.0309	.0291	.0282	.0714	.1727	.1612			
120.000						.3865			
130.000						.4587			
140.000						.2087			
150.000						.0908			
160.000						.1771			
170.000						.2096			
180.000	-.0349	-.0431	-.0488	-.0130	.1586	.2765			

MACH (1) = 2.500 ALPHA (4) = .000 RN/L = 2.5010 BETA = -5.9600

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.3425	.4883	.3336												
70.000	.3327	.4011	.3629												
80.000	.3407	.3824	.3869												
90.000			.4090	.2857	.1436	.0842	.0735	.0673	.0584	.0442	.0362	.0253	.0171	.0092	-.0026
100.000						.1055	.0939	.0815	.0602	.0451	.0281	.0170	.0092	.0014	-.0095
110.000						.1144	.0948	.0771	.0567	.0300	.0143	.0033	-.0055	-.0114	-.0203
120.000						.1570								-.0556	
130.000						.0620								-.0576	
140.000						-.0550								-.0488	
150.000						-.0661								-.0507	
160.000						-.0624								-.0606	
170.000						-.0651								-.0576	
180.000						-.0845	-.0744	-.0651	-.0587	-.0550	-.0513	-.0497	-.0478	-.0478	-.0478

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (1) = 2.500 ALPHA (4) = .000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0165	-.0114	-.0124	-.0163	-.0134	-.0183	-.0201	-.0210	-.0201	-.0164	-.0099	.0003	.0151	.0225	.0253
100.000	-.0154	-.0193	-.0222	-.0212	-.0212	-.0252	-.0219	-.0238	-.0219	-.0238	-.0192	-.0117	.0133	.0142	.0225
110.000	-.0282	-.0271	-.0301	-.0330	-.0321	-.0134	-.0275	-.0284	-.0284	-.0275	-.0266	-.0229	.0142	-.0090	.0077
120.000						-.0055								-.0432	
130.000						-.0516								-.0451	
140.000						-.0516								-.0460	
150.000						-.0460								-.0470	
160.000						-.0432								-.0516	
170.000						-.0442								-.0562	
180.000	-.0468	-.0456	-.0458	-.0438	-.0478	-.0470	-.0497	-.0516	-.0534	-.0553	-.0562	-.0395	-.0025	-.0581	-.0618

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0207		
70.000							.0415	.0494	.0353
80.000							.0881	.0573	.0345
90.000	.0161	.0040	-.0043	-.0053	-.0006	.0320	.1058	.0688	.0389
100.000	.0244	.0114	.0068	.0022	.0556	.1207			
110.000	.0131	.0068	.0077	.0362	.1498	.1612			
120.000						.3813			
130.000						.4068			
140.000						.1506			
150.000						.0451			
160.000						.1366			
170.000						.1647			
180.000	-.0479	-.0551	-.0618	.0353	.1357	.2104			

MACH (1) = 2.500 ALPHA (5) = 2.000 RN/L = 2.5000 BETA = -5.9600

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3808	.4394	.3047												
70.000	.3218	.4394	.3198												
80.000	.3101	.3818	.3393												
90.000			.36 5	.2409	.1213	.0619	.0522	.0451	.0407	.0309	.0172	.0118	.0018	-.0021	-.0156
100.000						.0823	.0699	.0593	.0460	.0318	.0182	.0054	-.0069	-.0127	-.0234
110.000						.1000	.0814	.0611	.0460	.0163	-.0001	-.0088	-.0214	-.0253	-.0350
120.000						.1266								-.0747	
130.000						.0451								-.0814	
140.000						-.0629								-.0766	
150.000						-.0811								-.0737	

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (1) = 2.500 ALPHA (5) = 2.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
180.000						-.0793								-.0795	
170.000						-.0765								-.0776	
180.000						-.0938	-.0856	-.0784	-.0784	-.0729	-.0692	-.0698	-.0689	-.0669	-.0669

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0234	-.0263	-.0282	-.0263	-.0272	-.0292	-.0274	-.0265	-.0237	-.0146	-.0001	.0090	.0172	.0227	.0181
100.000	-.0301	-.0359	-.0359	-.0369	-.0369	-.0379	- 0356	-.0356	-.0328	-.0265	-.0155	-.0037	.0136	.0118	.0154
110.000	-.0398	-.0447	-.0466	-.0476	-.0514	-.0263	-.0465	-.0456	-.0438	-.0428	-.0374	-.0237	.0136	-.0092	-.0029
120.000						-.0195								-.0620	
130.000						-.0729								-.0638	
140.000						-.0747								-.0647	
150.000						-.0702								-.0647	
160.000						-.0647								-.0656	
170.000						-.0629								-.0692	
180.000	-.0640	-.0640	-.0611	-.0521	-.0650	-.0647	-.0656	-.0674	-.0665	-.0683	-.0665	-.0419	-.0601	-.0647	-.0669

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0047		
70.000							.0135	.0300	.0236
80.000							.0643	.0468	.0227
90.000	.0081	-.0068	-.0139	-.0166	-.0157	.0263	.0933	.0634	.0291
100.000	.0181	.0017	-.0056	-.0166	-.0056	.1030			
110.000	.0962	-.0075	-.0102	-.0056	.1171	.1777			
120.000						.3605			
130.000						.5491			
140.000						.0881			
150.000						.0108			
160.000						.1065			
170.000						.1267			
180.000	-.0588	-.0805	-.0522	.0626	.1065	.1495			

IA35 ORBITER ASCENT CONFIGURATION (R@5007)

MACH (1) = 2.500 ALPHA (6) = 4.020 RN/L = 2.5010 BETA = -5.9600

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.5010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3922	.4055	.2795												
70.000	.3221	.4064	.2848												
80.000	.2821	.3984	.2990												
90.000			.3185	.2058	.0895	.0416	.0272	.0236	.0181	.0089	.0016	-.0039	-.0119	-.0168	-.0294
100.000						.0558	.0469	.0398	.0272	.0135	.0006	-.0094	-.0187	-.0255	-.0381
110.000						.0780	.0593	.0442	.0281	.0034	-.0094	-.0207	-.0323	-.0401	-.0498
120.000						.1010								-.0945	
130.000						.0181								-.1023	
140.000						-.0791								-.1003	
150.000						-.0956								-.0974	
160.000						-.0947								-.0974	
170.000						-.0892								-.0955	
180.000						-.1075	-.0993	-.0956	-.0947	-.0910	-.0901	-.0877	-.0848	-.0838	-.0828

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6820	.7100
PHI															
70.000	-.0343	-.0391	-.0401	-.0391	-.0372	-.0333	-.0291	-.0254	-.0134	-.0014	.0069	.0124	.0170	.0207	.0143
80.000	-.0430	-.0469	-.0498	-.0488	-.0488	-.0469	-.0430	-.0393	-.0310	-.0181	-.0107	-.0005	.0078	.0106	.0115
90.000	-.0538	-.0585	-.0605	-.0634	-.0634	-.0391	-.0605	-.0578	-.0513	-.0430	-.0347	-.0273	.0041	-.0162	-.0116
100.000						-.0304								-.0984	
110.000						-.1048								-.0882	
120.000						-.0993								-.0855	
130.000						-.0938								-.0827	
140.000						-.0882								-.0836	
150.000						-.0836								-.0836	
160.000															
170.000															
180.000	-.0799	-.0809	-.0799	-.0819	-.0828	-.0836	-.0836	-.0845	-.0836	-.0827	-.0808	-.0805	-.0753	-.0799	-.0790

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0190		
70.000							-.0125	.0115	.0050
80.000							.0388	.0300	.0060
90.000	.0025	-.0144	-.0217	-.0245	-.0245	-.0144	.0766	.0476	.0152
100.000	.0115	-.0070	-.0171	-.0227	-.0190	.0749			
110.000	-.0033	-.0199	-.0245	-.0273	.0309	.1795			
120.000						.3623			
130.000						.2919			
140.000						.0380			
150.000						-.0273			
160.000						.0872			
170.000						.0924			
180.000	-.0688	-.0707	-.0522	.0450	.0758	.1171			

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (1) = 2.500 ALPHA (7) = 6.000 RN/L = 2.5010 BETA = -5.9600

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.4051	.3573	.2396												
70.000	.3387	.3573	.2493												
80.000	.2821	.3343	.2582												
90.000			.2715	.1688	.0599	.0161	.0069	.0014	-.0032	-.0096	-.0142	-.0206	-.0268	-.0337	-.0415
100.000						.0325	.0270	.0188	.0069	-.0032	-.0133	-.0243	-.0337	-.0385	-.0493
110.000						.0555	.0422	.0206	.0115	-.0124	-.0261	-.0366	-.0473	-.0532	-.0619
120.000						.0794								-.1116	
130.000						.0005								-.1214	
140.000						-.1003								-.1214	
150.000						-.1122								-.1175	
160.000						-.1122								-.1165	
170.000						-.1049								-.1126	
180.000						-.1150	-.1104	-.1086	-.1086	-.1076	-.1049	-.1058	-.1048	-.1029	-.1009

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0454	-.0473	-.0502	-.0454	-.0356	-.0268	-.0210	-.0145	-.0090	-.0016	.0076	.0150	.0196	.0261	.0142
100.000	-.0541	-.0580	-.0590	-.0580	-.0541	-.0473	-.0357	-.0293	-.0237	-.0145	-.0071	.0003	.0169	.0141	.0105
110.000	-.0868	-.0697	-.0726	-.0726	-.0726	-.0444	-.0606	-.0533	-.0450	-.0422	-.0339	-.0283	.0169	-.0145	-.0116
120.000						-.0395								-.1345	
130.000						-.1262								-.1123	
140.000						-.1197								-.1049	
150.000						-.1132								-.0957	
160.000						-.1049								-.0902	
170.000						-.1003								-.0883	
180.000	-.0970	-.0980	-.0970	-.0970	-.0970	-.0957	-.0957	-.0939	-.0920	-.0902	-.0883	-.0773	-.0579	-.0865	-.0842

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0235		
70.000							-.0208	-.0006	-.0052
60.000							.0215	.0215	-.0033
90.000	.0031	-.0125	-.0235	-.0272	-.0263	-.0245	.0676	.0404	.0013
100.000	.0105	-.0079	-.0162	-.0263	-.0226	.0580			
110.000	-.0081	-.0217	-.0291	-.0337	.0059	.1870			
120.000						.3318			
130.000						.2660			
140.000						-.0346			
150.000						-.0263			
160.000						.0465			
170.000						.0527			
180.000	-.0769	-.0778	-.0474	.0188	.0404	.0799			

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (2) = 2.950 ALPHA (1) = -6.000 RN/L = 2.5136 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.3592	.3473	.3612												
70.000	.4196	.3473	.3681												
80.000	.4682	.3612	.3671												
90.000			.3523	.3314	.2631	.2016	.1838	.1709	.1590	.1422	.1272	.1130	.1041	.0976	.0823
100.000						.2086	.1997	.1818	.1620	.1402	.1262	.1089	.0965	.0878	.0769
110.000						.1689	.1798	.1749	.1590	.1293	.1130	.1008	.0878	.0812	.0703
120.000						.1788								.0550	
130.000						.1170								.0561	
140.000						.0253								.0507	
150.000						.0111								.0354	
160.000						.0172								.0201	
170.000						.0152								.0201	
180.000						-.0001	.0050	.0101	.0152	.0213	.0233	.0234	.0234	.0245	.0256

X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0789	.0725	.0703	.0670	.0659	.0638	.0628	.0597	.0546	.0526	.0557	.0567	.0434	.0618	.0605
100.000	.0703	.0659	.0627	.0627	.0638	.0605	.0618	.0597	.0577	.0546	.0536	.0536	.0475	.0587	.0585
110.000	.0649	.0627	.0627	.0594	.0583	.0212	.0597	.0587	.0587	.0557	.0546	.0516	.0485	.0505	.0513
120.000						.0016								.0434	
130.000						.0475								.0403	
140.000						.0495								.0393	
150.000						.0465								.0352	
160.000						.0424								.0281	
170.000						.0373								.0199	
180.000	.0289	.0321	.0376	.0376	.0310	.0281	.0270	.0250	.0240	.0454	.0403	.0383	.0485	.0107	.0051

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							.0913		
70.000							.1016	.1098	.0944
80.000							.1332	.1252	.0985
90.000	.0574	.0503	.0482	.0492	.0564	.1421	.1460	.1391	.1149
100.000	.0648	.0564	.0554	.0574	.1057	.1579			
110.000	.0595	.0585	.0616	.0790	.1953	.1795			
120.000						.4108			
130.000						.5260			
140.000						.3173			
150.000						.1923			
160.000						.1736			
170.000						.2858			
180.000	.0193	.0082	.0031	.0000	.1588	.3695			

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (2) = 2.950 ALPHA (2) = -4.020 RN/L = 2.5136 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3574	.3514	.4474												
70.000	.3839	.3334	.3473												
80.000	.4226	.3344	.3493												
90.000			.3493	.3195	.2363	.1768	.1590	.1501	.1382	.1190	.1097	.0901	.0854	.0777	.0645
100.000						.1877	.1759	.1590	.1432	.1210	.1087	.0922	.0777	.0701	.0580
110.000						.1739	.1709	.1570	.1382	.1097	.0922	.0810	.0690	.0613	.0493
120.000						.1659								.0285	
130.000						.0953								.0230	
140.000						.0067								.0252	
150.000						-.0108								.0154	
160.000						-.0077								.0011	
170.000						-.0077								-.0022	
180.000						-.0221	-.0180	-.0128	-.0087	-.0036	-.0005	-.0011	-.0011	.0000	.0044

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0580	.0526	.0493	.0460	.0460	.0416	.0387	.0345	.0314	.0304	.0314	.0356	.0088	.0397	.0352
100.000	.0504	.0449	.0427	.0405	.0394	.0372	.0366	.0356	.0345	.0304	.0294	.0304	.0150	.0345	.0332
110.00	.0438	.0418	.0383	.0361	.0329	.0318	.0345	.0325	.0314	.0304	.0284	.0284	.0160	.0284	.0290
120.000						.0219								.0160	
130.000						.0181								.0150	
140.000						.0181								.0160	
150.000						.0201								.0119	
160.000						.0212								.0078	
170.000						.0170								-.0015	
180.000	.0088	.0110	.0154	.0143	.0110	.0109	.0098	.0067	.0047	.0201	.0294	.0026	.0160	-.0097	-.0164

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0580		
70.000							.0797	.0838	.0662
80.000							.1024	.0983	.0755
90.000	.0342	.0259	.0228	.0218	.0280	.1106	.1189	.1189	.0786
100.000	.0404	.0332	.0332	.0321	.0755	.1441			
110.000	.0321	.0332	.0352	.0683	.1648	.1569			
120.000						.3738			
130.000						.4763			
140.000						.2575			
150.000						.1352			
160.000						.1392			
170.000						.2308			
180.000	-.0082	-.0144	-.0206	-.0195	.1303	.3018			

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (2) = 2.950 ALPHA (3) = -2.000 RN/L = 2.3136 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CF

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3133	.3262	.3796												
70.000	.3499	.3262	.3331												
80.000	.3778	.3103	.3430												
90.000			.3459	.3153	.2104	.1491	.1342	.1209	.1147	.1001	.0887	.0793	.0668	.0613	.0471
100.000						.1659	.1521	.1372	.1209	.1022	.0897	.0751	.0602	.0526	.0405
110.000						.1659	.1540	.1382	.1178	.0897	0731	.0613	.0493	.0427	.0329
120.000						.1857								.0000	
130.000						.0793								-.0054	
140.000						-.0102								-.0022	
150.000						-.0279								-.0054	
160.000						-.0289								-.0175	
170.000						-.0279								-.0219	
180.000						-.0393	-.0383	-.0331	-.0299	-.0247	-.0227	-.0208	-.0197	-.0185	-.0142

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.5730	.6880	.7100
PHI															
90.000	.0405	.0329	.0307	.0274	.0263	.0219	.0205	.0154	.0113	.0113	.0133	.0144	.0031	.0185	.0133
100.000	.0329	.0263	.0219	.0208	.0197	.0165	.0164	.0144	.0113	.0103	.0092	.0092	.0061	.0144	.0106
110.000	.0252	.0197	.0165	.0143	.0099	.0219	.0092	.0061	.0082	.0051	.0051	.0051	.0061	.0061	.0054
120.000						.0219								-.0123	
130.000						-.0062								-.0144	
140.000						-.0092								-.0123	
150.000						-.0092								-.0144	
160.000						-.0051								-.0154	
170.000						-.0072								-.0216	
180.000	-.0109	-.0109	-.0087	-.0087	-.0120	-.0103	-.0144	-.0154	-.0164	.0061	-.0051	.001	.0051	-.0277	-.0341

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8520	.9000	.9400
PHI									
60.000							.0314		
70.000							.0543	.0668	.0512
80.000							.0855	.0803	.0564
90.000	.0138	.0065	.0013	.0002	.0023	.0731	.0949	.0949	.0741
100.000	.0190	.0117	.0086	.0096	.0346	.1084			
110.000	.0117	.0086	.0117	.0283	.1323	.1392			
120.000						.3476			
130.000						.4197			
140.000						.2004			
150.000						.0845			
160.000						.1282			
170.000						.1767			
180.000	-.0247	-.0331	-.0383	-.0206	.1157	.2468			

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (2) = 2.950 ALPHA (4) = .000 RN/L = 2.5136 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3003	.3181	.3537												
70.000	.3220	.3211	.3339												
80.000	.3389	.2973	.3220												
90.000			.3379	.3003	.1836	.1219	.1053	.0970	.0887	.0794	.0690	.0618	.0500	.0445	.0313
100.000						.1450	.1302	.1126	.1012	.0836	.0690	.0556	.0445	.0379	.0259
110.000						.1549	.1421	.1188	.0979	.0711	.0545	.0445	.0335	.0248	.0160
120.000						.1777								-.0214	
130.000						.0722								-.0291	
140.000						-.0263								-.0291	
150.000						-.0419								-.0258	
160.000						-.0450								-.0335	
170.000						-.0470								-.0368	
180.000						-.0553	-.0533	-.0481	-.0450	-.0439	-.0398	-.0379	-.0335	-.0335	-.0324

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6980	.7190
PHI															
90.000	.0248	.0193	.0149	.0116	.0105	.0061	.0058	.0017	-.0035	-.0035	-.0025	-.0004	-.0045	.0037	.0026
100.000	.0182	.0127	.0083	.0061	.0039	.0006	-.0004	-.0035	-.0045	-.0066	-.0087	-.0066	-.0035	-.0014	-.0026
110.000	.0083	.0039	-.0005	-.0038	-.0060	.0083	-.0037	-.0097	-.0118	-.0118	-.0139	-.0066	-.0045	-.0139	-.0129
120.000						.0127								-.0367	
130.000						-.0305								-.0377	
140.000						-.0325								-.0377	
150.000						-.0325								-.0367	
160.000						-.0294								-.0377	
170.000						-.0284								-.0419	
180.000	-.0313	-.0302	-.0280	-.0280	-.0313	-.0305	-.0325	-.0356	-.0367	-.0211	-.0387	-.0159	-.0118	-.0460	-.0489

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0139		
70.000							.0417	.0551	.0396
80.000							.0726	.0684	.0448
90.000	.0026	-.0048	-.0067	-.0067	-.0067	.0612	.0849	.0695	.0489
100.000	.0038	-.0015	-.0015	-.0015	.0242	.0973			
110.000	-.0057	-.0077	-.0046	.0180	.1086	.1271			
120.000						.3306			
130.000						.3691			
140.000						.1450			
150.000						.0386			
160.000						.1075			
170.000						.1430			
180.000	-.0417	-.0479	-.0509	-.0077	.0880	.1746			

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (2) = 2.950 ALPHA (5) = 2.010 RN/L = 2.5136 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0890	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2893	.3051	.3259												
70.000	.2962	.3051	.3744												
80.000	.3002	.3051	.3200												
90.000			.3348	.2903	.1508	.0927	.0782	.0730	.0679	.0585	.0534	.0440	.0334	.0279	.0159
100.000						.1145	.1031	.0927	.0782	.0658	.0534	.0409	.0290	.0213	.0104
110.000						.1399	.1217	.0989	.0803	.0523	.0378	.0268	.0170	.0104	.0005
120.000						.1617								-.0390	
130.000						.0710								-.0489	
140.000						-.0336								-.0511	
150.000						-.0544								-.0489	
160.000						-.0595								-.0511	
170.000						-.0585								-.0544	
180.000						-.0689	-.0668	-.0626	-.0595	-.0575	-.0544	-.0522	-.0500	-.0500	-.0478

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0082	.0038	-.0017	-.0030	-.0072	-.0094	-.0098	-.0119	-.0160	-.0160	-.0140	-.0098	-.0150	-.0046	-.0025
100.000	.0038	-.0017	-.0072	-.0105	-.0127	-.0149	-.0160	-.0181	-.0202	-.0202	-.0212	-.0202	-.0140	-.0119	-.0098
110.000	-.0061	-.0105	-.0149	-.0182	-.0226	-.0072	-.0254	-.0274	-.0285	-.0295	-.0305	-.0316	-.0160	-.0085	-.0054
120.000						-.0006								-.0626	
130.000						-.0585								-.0606	
140.000						-.0564								-.0606	
150.000						-.0564								-.0585	
160.000						-.0533								-.0575	
170.000						-.0502								-.0606	
180.000	-.0489	-.0467	-.0467	-.0478	-.0489	-.0481	-.0513	-.0533	-.0544	-.0305	-.0564	-.0316	-.0171	-.0606	-.0619

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0025		
70.000							.0100	.0413	.0299
80.000							.0518	.0632	.0403
90.000	.0059	-.0004	-.0056	-.0097	-.0098	.0215	.0310	.0810	.0424
100.000	-.0004	.0017	-.0004	-.0025	.0007	.0977			
110.000	-.0160	-.0150	-.0066	.0027	.0883	.1643			
120.000						.3184			
130.000						.3351			
140.000						.0056			
150.000						-.0004			
160.000						.0810			
170.000						.0925			
180.000	-.0546	-.0598	-.0567	.0080	.0747	.1457			

IA35 ORBITER ASCENT CONFIGURATION (R35007)

MACH (2) = 2.950 ALPHA (6) = 4.020 RN/L = 2.5136 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2742	.2949	.2939												
90.000	.2712	.2939	.3492												
80.000	.2892	.2939	.3551												
90.000			.3008	.2613	.1216	.0745	.0557	.0494	.0452	.0400	.0337	.0263	.0187	.0132	.0011
100.000						.0860	.0755	.0693	.0630	.0504	.0400	.0274	.0165	.0099	-.0022
110.000						.1216	.1017	.0808	.0651	.0400	.0253	.0154	.0035	-.0033	-.0132
120.000						.1428								-.0573	
130.000						.0630								-.0661	
140.000						-.0460								-.0716	
150.000						-.0647								-.0683	
160.000						-.0647								-.0661	
170.000						-.0731								-.0694	
180.000						-.0804	-.0794	-.0752	-.0720	-.0710	-.0689	-.0661	-.0650	-.0650	-.0628

X/L	.4500	.4680	.4660	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.5540	.6730	.6900	.7190
PHI															
90.000	-.0055	-.0099	-.0143	-.0165	-.0176	-.0209	-.0197	-.0207	-.0207	-.0176	-.0114	-.0032	.0124	.0103	.0072
100.000	-.0099	-.0154	-.0209	-.0232	-.0243	-.0276	-.0259	-.0279	-.0290	-.0279	-.0248	-.0186	-.0083	-.0033	-.0121
110.000	-.0198	-.0243	-.0287	-.0320	-.0353	-.0209	-.0393	-.0403	-.0403	-.0413	-.0393	-.0362	-.0091	-.0248	-.0146
120.000						-.0143								-.0868	
130.000						-.0826								-.0837	
140.000						-.0785								-.0816	
150.000						-.0754								-.0806	
160.000						-.0723								-.0754	
170.000						-.0682								-.0733	
180.000	-.0606	-.0617	-.0617	-.0628	-.0650	-.0661	-.0661	-.0671	-.0682	-.0517	-.0692	-.0382	-.0197	-.0713	-.0713

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0124		
70.000							-.0032	.0237	.0154
80.000							.0299	.0505	.0268
90.000	.0092	-.0011	-.0073	-.0114	-.0145	-.0021	.0670	.0711	.0371
100.000	.0092	.0030	-.0011	-.0073	-.0083	.0670			
110.000	-.0094	-.0124	-.0104	-.0104	.0330	.1703			
120.000						.2990			
130.000						.2754			
140.000						.0392			
150.000						-.0341			
160.000						.0526			
170.000						.0557			
180.000	-.0851	-.0682	-.0389	.0061	.0484	.0969			

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

IA35 ORBITER ASCENT CONFIGURATION (R05007)

MACH (2) = 2.950 ALPHA (7) = 6.000 RN/L = 2.5136 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2739	.4288	.2775												
70.000	.2602	.4239	.3006												
80.000	.2454	.2967	.3154												
90.000			.3193	.2138	.0936	.0469	.0344	.0261	.0219	.0167	.0125	.0084	.0025	-.0007	-.0094
100.000						.0562	.0469	.0417	.0354	.0261	.0188	.0105	.0025	-.0029	-.0127
110.000						.0863	.0718	.0572	.0437	.0240	.0115	.0014	-.0094	-.0149	-.0236
120.000						.1123								-.0737	
130.000						.0489								-.0814	
140.000						-.0529								-.0857	
150.000						-.0706								-.0846	
160.000						-.0706								-.0824	
1. .000						-.0779								-.0824	
130.0						-.0862	-.0841	-.0810	-.0779	-.0779	-.0779	-.0770	-.0781	-.0770	-.0781

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6800	.7100
PHI															
90.000	-.0149	-.0193	-.0225	-.0258	-.0258	-.0258	-.0264	-.0243	-.0202	-.0150	-.0078	-.0036	-.0233	.0067	.0067
100.000	-.0193	-.0247	-.0280	-.0301	-.0323	-.0334	-.0347	-.0357	-.0316	-.0254	-.0202	-.0160	-.0181	-.0046	-.0046
110.000	-.0291	-.0334	-.0367	-.0410	-.0422	-.0269	-.0481	-.0492	-.0471	-.0450	-.0409	-.0347	-.0150	-.0254	-.0212
120.000						-.0225								-.1051	
130.000						-.0989								-.1030	
140.000						-.0989								-.0999	
150.000						-.0937								-.0968	
160.000						-.0885								-.0917	
170.000						-.0864								-.0865	
180.000	-.0770	-.0759	-.0748	-.0737	-.0737	-.0772	-.0803	-.0803	-.0813	-.0450	-.0803	-.0347	-.0171	-.0803	-.0792

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0171		
70.000							-.0088	.0119	.0057
80.000							.0202	.0399	.0171
90.000	.0067	-.0026	-.0079	-.0119	-.0140	-.0078	.0596	.0616	.0223
100.000	.0078	.0005	-.0026	-.0067	-.0098	.0554			
110.000	-.0129	-.0150	-.0129	-.0119	.0109	.1790			
120.000						.3073			
130.000						.2338			
140.000						-.0191			
150.000						-.0461			
160.000						.0171			
170.000						.0109			
180.000	-.0751	-.0751	-.0668	-.0160	.0161	.0575			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063)

(RQ5007)

IA35 ORBITER ASCENT CONFIGURATION

MACH (3) = 4.000 ALPHA (1) = -6.010 RN/L = 3.4990 BETA = -5.9800

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	-.1039	.2949	.2878												
70.000	-.1034	.3133	.2691												
80.000	-.1034	-.1039	.2797												
90.000			.3267	.2144	.1432	.1163	.1333	.1545	.1673	.1583	.1508	.1451	.1357	.1313	.1187
100.000						.1163	.1107	.1177	.1319	.1522	.1541	.1446	.1343	.1270	.1155
110.000						.0857	.0805	.0828	.0894	.0927	.1069	.1304	.1304	.1231	.1099
120.000						.2029								.0490	
130.000						.1588								.0076	
140.000						.0607								-.0104	
150.000						.0362								-.0167	
160.000						.0305								-.0192	
170.000						.0333								-.0148	
180.000						.0239	.0135	.0149	.0182	.0027	-.0072	-.0128	-.0109	-.0075	.0008

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.1119	.1046	.1007	.0963	.0953	.0909	.0875	.0823	.0763	.0703	.0681	.0666	.0666	.0651	.0591
100.000	.1075	.1007	.0987	.0963	.0919	.0851	.0808	.0741	.0703	.0658	.0621	.0591	.0583	.0563	.0533
110.000	.1060	.1055	.0977	.0885	.0792	.0520	.0673	.0613	.0583	.0546	.0516	.0591	.0568	.0456	.0432
120.000						.0398								.0314	
130.000						.0111								.0418	
140.000						.0269								.0426	
150.000						.0306								.0441	
160.000						.0328								.0426	
170.000						.0328								.0351	
180.000	.0071	.0115	.0159	.0198	.0237	.0269	.0299	.0328	.0358	.0366	.0366	.0356	.0523	.0314	.0295

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							.0496		
70.000							.0675	.0860	.0828
80.000							.1045	.1061	.0976
90.000	.0588	.0506	.0464	.0438	.0380	.0923	.1209	.1114	.1055
100.000	.0560	.0506	.0491	.0464	.0681	.1219			
110.000	.0501	.0506	.0491	.0628	.1499	.1557			
120.000						-.0988			
130.000						-.0983			
140.000						.3117			
150.000						.1858			
160.000						.1235			
170.000						.2575			
180.000	.0353	.0263	.0195	.0190	.1019	.3855			

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (3) = 4.000 ALPHA (2) = -4.000 RN/L = 3.4990 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3331	.2680	.2657												
70.000	-.1045	.2845	.2492												
80.000	-.1045	.3304	.2519												
90.000			.2932	.1982	.1400	.1329	.1462	.1495	.1448	.1372	.1315	.1258	.1173	.1124	.0997
100.000						.1049	.1158	.1329	.1471	.1419	.1348	.1253	.1163	.1100	.0992
110.000						.0831	.0783	.0826	.0982	.1106	.1234	.1198	.1105	.1031	.0923
120.000						.1733								.0409	
130.000						.1305								.0160	
140.000						.0436								.0077	
150.000						.0251								.0052	
160.000						.0190								-.0041	
170.000						.0213								-.0119	
180.000						.0137	.0128	.0118	.0147	.0147	.0104	.0042	-.0075	-.0114	-.0149

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0919	.0845	.0786	.0742	.0718	.0669	.0647	.0617	.0565	.0550	.0535	.0520	.0542	.0527	.0456
100.000	.0904	.0826	.0762	.0713	.0674	.0630	.0610	.0595	.0565	.0542	.0505	.0482	.0520	.0444	.0376
110.000	.0840	.0777	.0723	.0669	.0615	.0605	.0557	.0557	.0535	.0497	.0444	.0414	.0497	.0347	.0281
120.000						.0551								.0009	
130.000						.0106								.0031	
140.000						.0009								.0099	
150.000						.0016								.0129	
160.000						.0054								.0144	
170.000						.0084								.0099	
180.000	-.0144	-.0124	-.0030	-.0026	.0023	.0061	.0076	.0091	.0106	.0106	.0091	.0309	.0257	.0054	.0020

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0302		
70.000							.0408	.0674	.0631
80.000							.0716	.0812	.0732
90.000	.0468	.0382	.0312	.0297	.0265	.0493	.0939	.0934	.0865
100.000	.0429	.0371	.0307	.0328	.0397	.0939			
110.000	.0328	.0270	.0307	.0451	.1189	.1571			
120.000						.3551			
130.000						-.0999			
140.000						.2422			
150.000						.1194			
160.000						.1146			
170.000						.1900			
180.000	.0105	.0058	.0015	-.0001	.0626	.3178			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(RQ5007)

IA35 ORBITER ASCENT CONFIGURATION

MACH (3) = 4.000 ALPHA (3) = -1.990 RN/L = 3.4990 BETA = -5.9800

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3030	.2467	.2586												
70.000	.3519	.2800	.2426												
80.000	-.1040	.2975	.2321												
90.000			.2645	.1991	.1595	.1330	.1259	.123.	.1221	.1169	.1103	.1060	.0997	.0963	.0850
100.000						.1098	.1264	.1368	.1354	.1249	.1169	.1079	.0982	.0923	.0796
110.000						.0842	.0856	.0975	.1131	.1155	.1093	.1012	.0919	.0850	.0742
120.000						.1477								.0292	
130.000						.1084								.0018	
140.000						.0254								-.0026	
150.000						.0093								-.0056	
160.000						.0027								-.0100	
170.000						.0036								-.0119	
180.000						-.0021	-.0025	-.0044	-.0021	-.0025	-.0025	-.0070	-.0105	-.0105	-.0095

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6860	.7100
PHI															
90.000	.0777	.0708	.0649	.0600	.0571	.0527	.0493	.0440	.0403	.0350	.0343	.0320	.0245	.0305	.0274
100.000	.0723	.0644	.0576	.0527	.0493	.0453	.0425	.0403	.0373	.0343	.0305	.0275	.0252	.0260	.0237
110.000	.0669	.0600	.0546	.0493	.0439	.0527	.0343	.0305	.0267	.0237	.0222	.0207	.0252	.0184	.0180
120.000						.0566								-.0042	
130.000						.0049								-.0079	
140.000						.0049								-.0109	
150.000						.0041								-.0109	
160.000						-.0042								-.0102	
170.000						-.0072								-.0124	
180.000	-.0065	-.0061	-.0031	-.0012	-.0070	-.0094	-.0102	-.0102	-.0102	-.0109	-.0124	-.0064	.0222	-.0162	-.0157

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0093		
70.000							.0205	.0461	.0493
80.000							.0514	.0610	.0573
90.000	.0298	.0228	.0194	.0173	.0146	.0306	.0738	.0690	.0679
100.000	.0298	.0242	.0232	.0216	.0232	.0695			
110.000	.0228	.0173	.0232	.0226	.0722	.1431			
120.000						.3243			
130.000						.3851			
140.000						.1767			
150.000						.0578			
160.000						.0690			
170.000						.1230			
180.000	-.0093	-.0131	-.0183	-.0138	.0477	.1964			

IA35 ORBITER ASCENT CONFIGURATION (R05007)

MACH (3) = 4.000 ALPHA (4) = .010 RN/L = 3.4990 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2785	.2340	.2533												
70.000	.3175	.2377	.2409												
80.000	.3322	.2694	.2249												
90.000			.2400	.2079	.1522	.1151	.1060	.1046	.1060	.1027	.0974	.0913	.0828	.0788	.0675
100.000						.1156	.1236	.1227	.1165	.1070	.0979	.0879	.0769	.0709	.0616
110.000						.0913	.0974	.1113	.1175	.1036	.0936	.0828	.0719	.0650	.0537
120.000						.1263								.0147	
130.000						.0870								-.0050	
140.000						.0088								-.0178	
150.000						-.0069								-.0178	
160.000						-.0126								-.0193	
170.000						-.0126								-.0222	
180.000						-.0169	-.0188	-.0197	-.0183	-.0188	-.0188	-.0203	-.0217	-.0247	-.0242

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0611	.0542	.0488	.0433	.0399	.0349	.0326	.0273	.0243	.0198	.0190	.0167	.0175	.0160	.0125
100.000	.0566	.0497	.0448	.0399	.0364	.0315	.0281	.0251	.0213	.0190	.0152	.0130	.0160	.0114	.0093
110.000	.0463	.0389	.0330	.0280	.0251	.0399	.0198	.0175	.0152	.0137	.0107	.0084	.0137	.0031	-.0002
120.000						.0458								-.0272	
130.000						-.0136								-.0272	
140.000						-.0151								-.0257	
150.000						-.0143								-.0234	
160.000						-.0158								-.0226	
170.000						-.0181								-.0226	
180.000	-.0222	-.0198	-.0173	-.0153	-.0153	-.0151	-.0166	-.0173	-.0189	-.0204	-.0219	-.0173	.0024	-.0242	-.0241

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0013		
70.000							.0082	.0353	.0390
80.000							.0347	.0480	.0490
90.000	.0157	.0093	.0056	.0035	.0019	.0167	.0570	.0549	.0549
100.000	.0141	.0098	.0082	.0056	.0088	.0459			
110.000	.0056	.0013	.0024	.0082	.0533	.1137			
120.000						.2912			
130.000						.3322			
140.000						.1376			
150.000						.0284			
160.000						.0316			
170.000						.0856			
180.000	-.0199	-.0267	-.0310	-.0183	.0263	.1089			

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (5) = 4.000 ALPHA (5) = 2.010 RN/L = 2.4990 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2570	.2174	.2388												
70.000	.2848	.2201	.2365												
80.000	.2939	.2438	.2283												
90.000			.2224	.2146	.1403	.1017	.0955	.1013	.0970	.0884	.0808	.0746	.0658	.0609	.0505
100.000						.1160	.1098	.1046	.0994	.0889	.0832	.0741	.0639	.0579	.0470
110.000						.1051	.1165	.1165	.1055	.0884	.0755	.0604	.0475	.0406	.0316
120.000						.1117								-.0001	
130.000						.0684								-.0140	
140.000						-.0045								-.0293	
150.000						-.0183								-.0303	
160.000						-.0245								-.0303	
170.000						-.0250								-.0313	
180.000						-.0283	-.0297	-.0312	-.0297	-.0302	-.0302	-.0333	-.0333	-.0328	-.0328

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0440	.0381	.0326	.0282	.0252	.0212	.0201	.0164	.0134	.0104	.0089	.0074	-.0054	.0059	-.0003
100.000	.0411	.0346	.0297	.0252	.0222	.0173	.0179	.0141	.0104	.0069	.0051	.0029	-.0046	.0014	-.0035
110.000	.0297	.0277	.0247	.0202	.0158	.0272	.0104	.0066	.0033	.0014	-.0016	-.0039	-.0046	-.0076	-.0125
120.000						.0351								-.0421	
130.000						-.0301								-.0421	
140.000						-.0316								-.0413	
150.000						-.0301								-.0391	
160.000						-.0293								-.0376	
170.000						-.0301								-.0376	
180.000	-.0328	-.0318	-.0298	-.0293	-.0303	- 0301	-.0308	-.0308	-.0323	-.0323	-.0331	-.0316	-.0046	-.0376	-.0376

X/L	7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0061		
70.000							.0051	.0295	.0322
80.000							.0285	.0466	.0450
90.000	.0040	-.0019	-.0040	-.0056	-.0061	.0104	.0472	.0541	.0488
100.000	.0019	-.0024	-.0035	-.0051	-.0024	.0306			
110.000	-.0067	-.0104	-.0099	-.0067	.0253	.0919			
120.000						.2468			
130.000						.2643			
140.000						.0738			
150.000						-.0008			
160.000						.0184			
170.000						.0461			
180.000	-.0349	-.0328	-.0397	-.0264	.0051	.0994			

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (3) = 4.000 ALPHA (6) = 4.000 RN/L = 3.4390 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2408	.2074	.2147												
70.000	.2549	.2048	.2216												
80.000	.2563	.2197	.2188												
90.000			.2106	.2097	.1303	.1055	.0994	.0851	.0732	.0646	.0593	.0546	.0482	.0447	.0353
100.000						.1027	.0936	.0889	.0898	.0789	.0679	.0565	.0467	.0422	.0333
110.000						.1165	.1136	.1027	.0865	.0665	.0512	.0422	.0373	.0328	.0248
120.000						.1036								-.0180	
130.000						.0512								-.0265	
140.000						-.0164								-.0345	
150.000						-.0297								-.0410	
160.000						-.0355								-.0410	
170.000						-.0369								-.0415	
180.000						-.0393	-.0402	-.0416	-.0407	-.0407	-.0407	-.0430	-.0430	-.0425	-.0415

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0293	.0238	.0183	.0138	.0109	.0069	.0064	.0026	-.0004	-.0034	-.0042	-.0049	-.0042	-.0049	-.0090
100.000	.0278	.0223	.0168	.0119	.0079	.0034	.0034	-.0004	-.0027	-.0057	-.0079	-.0102	-.0102	-.0109	-.0132
110.000	.0193	.0148	.0109	.0064	.0014	.0133	-.0034	-.0079	-.0102	-.0132	-.0147	-.0162	-.0102	-.0200	-.0233
120.000						.0223								-.0561	
130.000						-.0441								-.0561	
140.000						-.0471								-.0569	
150.000						-.0463								-.0554	
160.000						-.0448								-.0539	
170.000						-.0448								-.0531	
180.000	-.0405	-.0410	-.0430	-.0444	-.0454	-.0433	-.0441	-.0456	-.0456	-.0463	-.0471	-.0335	-.0155	-.0501	-.0499

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0106		
70.000							-.0010	.0150	.0219
80.000							.0155	.0363	.0357
90.000	-.0042	-.0090	-.0095	-.0036	-.0015	-.0036	.0458	.0496	.0453
100.000	-.0074	-.0127	-.0217	-.0090	-.0004	.0246			
110.000	-.0169	-.0180	-.0191	-.0164	.0139	.1219			
120.000						.2117			
130.000						.2359			
140.000						.0347			
150.000						-.0276			
160.000						-.0074			
170.000						-.0020			
180.000	-.0487	-.0441	-.0377	-.0281	-.0169	.0214			

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (3) = 4.000 ALPHA (7) = 6.010 RN/L = 3.4990 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0970	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2242	.2082	.3254												
70.000	.2301	.1955	.2110												
80.000	.2233	.1955	.2110												
90.000			.2110	.1950	.1469	.0920	.0725	.0572	.0510	.0453	.0410	.0372	.0322	.0287	.0213
100.000						.0978	.0897	.0768	.0653	.0558	.0491	.0429	.0332	.0307	.0213
110.000						.1068	.0954	.0830	.0768	.0572	.0453	.0352	.0263	.0213	.0129
120.000						.1054								-.0330	
130.000						.0419								-.0379	
140.000						-.0239								-.0439	
150.000						-.0382								-.0443	
160.000						-.0435								-.0473	
170.000						-.0449								-.0478	
180.000						-.0473	-.0487	-.0492	-.0482	-.0478	-.0473	-.0478	-.0478	-.0478	-.0478

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0189	.0124	.0080	.0041	.0006	-.0034	-.0057	-.0079	-.0102	-.0117	-.0117	-.0117	-.0124	-.0087	-.0107
100.000	.0184	.0110	.0065	.0021	-.0019	-.0058	-.0087	-.0109	-.0140	-.0147	-.0162	-.0170	-.0124	-.0155	-.0183
110.000	.0075	.0031	-.0009	-.0048	-.0083	.0036	-.0155	-.0177	-.0200	-.0230	-.0237	-.0253	-.0155	-.0260	-.0290
120.000						.0139								-.0689	
130.000						-.0569								-.0667	
140.000						-.0584								-.0652	
150.000						-.0592								-.0622	
160.000						-.0576								-.0614	
170.000						-.0554								-.0607	
180.000	-.0483	-.0483	-.0483	-.0493	-.0508	-.0539	-.0554	-.0569	-.0576	-.0584	-.0592	-.0546	-.0313	-.0592	-.0581

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0193		
70.000							-.0091	.0038	.0129
80.000							.0049	.0264	.0248
90.000	-.0005	-.0010	-.0027	-.0043	-.0075	-.0053	.0329	.0431	.0345
100.000	-.0086	-.0059	-.0016	-.0016	-.0021	.0151			
110.000	-.0210	-.0188	-.0140	-.0097	.0092	.1372			
120.000						.2461			
130.000						.1717			
140.000						.0011			
150.000						-.0473			
160.000						-.0306			
170.000						-.0312			
180.000	-.0554	-.0522	-.0505	-.0468	-.0419	-.0134			

IA35 ORBITER ASCENT CONFIGURATION (R05007)

MACH (4) = 4.500 ALPHA (1) = -6.010 RN/L = 3.5017 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.3770	.2937	.2661												
70.000	.4509	.3235	.2612												
60.000	-.0926	.3803	.2827												
90.000			.3345	.2202	.1310	.1009	.1073	.1223	.1327	.1351	.1391	.1356	.1284	.1242	.1195
100.000						.1078	.1020	.0980	.0997	.1055	.1142	.1246	.1242	.1201	.1112
110.000						.0934	.0829	.0806	.0800	.0754	.0754	.0809	.0904	.0969	.1032
120.000						.1941								.0268	
130.000						.1519								-.0011	
140.000						.0522								-.0129	
150.000						.0221								-.0183	
160.000						.0146								-.0195	
170.000						.0158								-.0171	
180.000						.0123	.0210	.0169	.0042	-.0051	-.0109	-.0153	-.0147	-.0118	-.0023

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.1100	.1048	.1005	.0981	.0963	.0928	.0909	.0864	.0803	.0750	.0697	.0670	.0662	.0635	.0534
100.000	.1058	.1017	.0999	.0987	.0945	.0880	.0847	.0803	.0741	.0706	.0662	.0609	.0600	.0582	.0501
110.000	.1070	.1052	.0975	.0886	.0785	.0738	.0715	.0670	.0626	.0582	.0565	.0520	.0503	.0468	.0385
120.000						.0479								.0124	
130.000						.0027								.0282	
140.000						-.0106								.0397	
150.000						.0229								.0415	
160.000						.0247								.0406	
170.000						.0265								.0379	
180.000	.0037	.0084	.0132	.0173	.0203	.0247	.0282	.0309	.0335	.0362	.0379	.0371	.0371	.0353	.0313

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							.0424		
70.000							.0508	.0774	.0780
80.000							.0839	.0988	.0943
90.000	.0592	.0488	.0488	.0372	.0404	.0631	.1209	.1189	.1059
100.000	.0540	.0450	.0437	.0437	.0566	.1228			
110.000	.0437	.0385	.0398	.0579	.1150	.1514			
120.000						.4094			
130.000						-.0920			
140.000						.2889			
150.000						.1579			
160.000						.1118			
170.000						.2299			
180.000	.0352	.0300	.0255	.0268	.0839	.3054			

IA35 ORBITER ASCENT CONFIGURATION (RQ50D7)

MACH (4) = 4.500 ALPHA (2) = -4.000 RN/L = 3.5017 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.3392	.2839	.2514												
70.000	.3981	.2887	.2379												
80.000	.4305	.3370	.2526												
90.000			.2986	.2003	.1151	.1016	.1169	.1298	.1339	.1292	.1233	.1180	.1105	.1069	.0967
100.000						.0910	.0928	.1010	.1122	.1163	.1221	.1186	.1105	.1057	.0973
110.000						.0875	.0763	.0757	.0775	.0781	.0845	.0942	.1015	.1003	.0918
120.000						.1750								.0182	
130.000						.1380								-.0029	
140.000						.0493								-.0141	
150.000						.0328								-.0114	
160.000						.0217								-.0174	
170.000						.0193								-.0217	
180.000						.0140	.0117	.0052	.0005	.0011	-.0036	-.0132	-.0192	-.0217	-.0241

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0918	.0858	.0804	.0761	.0713	.0665	.0657	.0621	.0576	.0549	.0541	.0532	.0541	.0541	.0404
100.000	.0912	.0852	.0792	.0743	.0701	.0653	.0639	.0603	.0567	.0549	.0514	.0469	.0433	.0415	.0318
110.000	.0858	.0792	.0743	.0689	.0707	.0560	.0594	.0576	.0541	.0487	.0433	.0397	.0370	.0334	.0239
120.000						.0592								-.0087	
130.000						-.0006								-.0141	
140.000						-.0006								-.0051	
150.000						-.0141								.0056	
160.000						-.0069								.0092	
170.000						-.0033								.0074	
180.000	-.0217	-.0186	-.0144	-.0108	-.0072	-.0024	-.0006	.0021	.0039	.0047	.0065	.0056	.0056	.0056	.0015

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							.0206		
70.000							.0279	.0484	.0497
80.000							.0464	.0728	.0688
90.000	.0484	.0332	.0325	.0292	.0266	.0299	.0807	.0893	.0814
100.000	.0371	.0318	.0318	.0299	.0318	.0754			
110.000	.0279	.0219	.0213	.0292	.0735	.1626			
120.000						.3043			
130.000						.4189			
140.000						.2241			
150.000						.0900			
160.000						.0966			
170.000						.1600			
180.000	.0074	.0041	.0015	.0021	.0585	.2864			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

IA35 ORBITER ASCENT CONFIGURATION (RQ5007)

MACH (4) = 4.500 ALPHA (3) = -2.000 RN/L = 3.5017 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.3047	.2412	.2383												
70.000	.3550	.2599	.2260												
80.000	.3782	.3008	.2271												
90.000			.2660	.1849	.1246	.1146	.1152	.1135	.1111	.1070	.1012	.0988	.0917	.0875	.0778
100.000						.0847	.0970	.1105	.1158	.1164	.1111	.1017	.0947	.0899	.0802
110.000						.0806	.0730	.0754	.0859	.0883	.0935	.0959	.0899	.0845	.0754
120.000						.1469								.0211	
130.000						.1123								-.0030	
140.000						.0314								-.0048	
150.000						.0150								-.0060	
160.000						.0086								-.0060	
170.000						.0080								-.0096	
180.000						.0039	.0021	.0004	.0009	.0009	-.0002	-.0030	-.0090	-.0096	-.0108

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0738	.0682	.0646	.0615	.0591	.0543	.0524	.0488	.0443	.0407	.0380	.0353	.0353	.0344	.0224
100.000	.0730	.0664	.0603	.0555	.0507	.0453	.0434	.0407	.0380	.0362	.0335	.0318	.0300	.0291	.0204
110.000	.0688	.0628	.0567	.0513	.0507	.0404	.0380	.0335	.0300	.0255	.0228	.0210	.0210	.0192	.0105
120.000						.0416								-.0059	
130.000						.0057								-.0149	
140.000						.0066								-.0194	
150.000						-.0158								-.0194	
160.000						-.0212								-.0149	
170.000						-.0185								-.0140	
180.000	-.0163	-.0205	-.0217	-.0205	-.0193	-.0176	-.0158	-.0149	-.0131	-.0140	-.0140	-.0131	-.0140	-.0149	-.0181

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							.0018		
70.000							.0105	.0304	.0370
80.000							.0317	.0496	.0490
90.000	.0264	.0204	.0164	.0131	.0105	.0171	.0616	.0616	.0569
100.000	.0257	.0211	.0204	.0178	.0158	.0549			
110.000	.0178	.0138	.0144	.0191	.0450	.1439			
120.000						.2921			
130.000						.3337			
140.000						.1260			
150.000						.0324			
160.000						.0629			
170.000						.0788			
180.000	-.0148	-.0168	-.0194	-.0088	.0337	.1618			

OA64 ORBITER ENTRY CONFIGURATION (RQ4001) (03 JAN 74)

REFERENCE DATA

PARAMETRIC DATA

SREF = .0000 SQ.IN. XMRP = .0000 IN. BETA = 6.000 ELEVON = -15.000
LREF = .0000 IN. YMRP = .0000 IN.
BREF = .0000 IN. ZMRP = .0000 IN.
SCALE = .0150 SCALE

MACH (1) = 2.500 ALPHA (1) = 8.000 RN/L = 2.4999 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0834	.0892	.0325												
70.000	.0907	.0616	.0398												
80.000	.1009	.0689	.0485												
90.000			.0558	-.0015	-.0602	-.0725	-.0695	-.0648	-.0617	-.0617	-.0633	-.0633	-.0674	-.0674	-.0744
100.000						-.0710	-.0710	-.0695	-.0725	-.0741	-.0756	-.0772	-.0796	-.0814	-.0831
110.000						-.0880	-.0942	-.0957	-.0880	-.0911	-.0957	-.0954	-.0954	-.0954	-.0819
120.000						-.0679								-.1024	
130.000						-.1065								-.0989	
140.000						-.1421								-.1042	
150.000						-.1359								-.1007	
160.000						-.1312								-.0954	
170.000						-.1312								-.0972	
180.000						-.1312	-.1266	-.1173	-.1158	-.1127	-.1096	-.1094	-.1077	-.1042	-.0972

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5990	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0761	-.0796	-.0814	-.0831	-.0831	-.0814	-.0807	-.0807	-.0776	-.0776	-.0713	-.0681	-.0634	-.0619	-.0576
100.000	-.0831	-.0831	-.0831	-.0814	-.0779	-.0779	-.0760	-.0729	-.0729	-.0713	-.0681	-.0650	-.0603	-.0555	-.0499
110.000	-.0901	-.0831	-.0814	-.0761	-.0709	-.0674	-.0619	-.0603	-.0587	-.0571	-.0545	-.0540	-.0524	-.0524	-.0452
120.000						-.0498								-.0398	
130.000						-.0461								-.0398	
140.000						-.0461								-.0398	
150.000						-.0540								-.0398	
160.000						-.0619								-.0493	
170.000						-.0760								-.0571	
180.000	-.0919	-.0901	-.0849	-.0849	-.0831	-.0807	-.0776	-.0776	-.0744	-.0713	-.0681	-.0697	-.0650	-.0624	-.0592

X/L	.7290	.7470	.7570	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1074		
90.000							-.0965	-.1011	-.0607
100.000							-.0716	-.0872	-.1027
110.000							-.0592	-.0747	-.0949
120.000	-.0807	-.0783	-.0825	-.0856	-.0701	-.0452			
130.000	-.0452	-.0576	-.0823	-.0592	-.0281	-.0203			
140.000	-.0436	-.0390	-.0405	-.0001	.0232	-.0126			
150.000						.0701			

OA64 ORBITER ENTRY CONFIGURATION (RQ43D1)

MACH (1) = 2.500 ALPHA (1) = 8.000

SECTION (1)FUSEL ~ DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
130.000						.1886			
140.000						.2666			
150.000						.2276			
160.000						.1467			
170.000						.1683			
180.000	-.0499	-.0499	-.0405	.0368	.0773	.2406			

MACH (1) = 2.500 ALPHA (2) = 10.000 RN/L = 2.4999 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.0808	.0750	.0296												
70.000	.0765	.0575	.0400												
80.000	.0838	.0619	.0317												
90.000			.0575	-.0077	-.0621	-.0777	-.0761	-.0730	-.0684	-.0699	-.0699	-.0684	-.0725	-.0725	-.0778
100.000						-.0684	-.0653	-.0637	-.0653	-.0684	-.0699	-.0715	-.0742	-.0778	-.0813
110.000						-.0761	-.0808	-.0808	-.0808	-.0870	-.0886	-.0918	-.0953	-.0953	-.0933
120.000						-.0668								-.1093	
130.000						-.1104								-.0988	
140.000						-.1492								-.1006	
150.000						-.1415								-.1023	
160.000						-.1399								-.1006	
170.000						-.1384								-.1023	
180.000						-.1384	-.1368	-.1290	-.1259	-.1228	-.1197	-.1198	-.1181	-.1146	-.1 38

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7150
PHI															
90.000	-.0795	-.0830	-.0848	-.0900	-.0900	-.0918	-.0940	-.0971	-.0971	-.0987	-.0924	-.0860	-.0829	-.0797	-.0756
100.000	-.0830	-.0883	-.0900	-.0900	-.0900	-.0935	-.0924	-.0908	-.0876	-.0845	-.0797	-.0781	-.0719	-.0695	-.0645
110.000	-.0988	-.0988	-.0953	-.0918	-.0883	-.0848	-.0829	-.0813	-.0765	-.0734	-.0686	-.0639	-.0607	-.0607	-.0565
120.000						-.0637								-.0512	
130.000						-.0512								-.0465	
140.000						-.0480								-.0401	
150.000						-.0528								-.0401	
160.000						-.0623								-.0512	
170.000						-.0765								-.0512	
180.000	-.1006	-.0988	-.0935	-.0900	-.0900	-.0860	-.0813	-.0765	-.0718	-.0639	-.0623	-.0607	-.0607	-.0575	-.0517

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									

OA64 ORBITER ENTRY CONFIGURATION (RQ4001)

MACH (1) = 2.500 ALPHA (2) = 10.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1457		
70.000							-.1266	- 1378	-.1043
60.000							-.0995	-.1154	-.1298
50.000	-.0772	-.0915	-.1011	-.1027	-.0884	-.0676	-.0736	-.1043	-.1139
100.000	-.0581	-.0676	-.0708	-.0676	-.0358	-.0533			
110.000	-.0333	-.0501	-.0501	-.0151	.0072	-.0198			
120.000						.0572			
130.000						.1683			
140.000						.2577			
150.000						.2289			
160.000						.1683			
170.000						.1856			
180.000	-.0437	-.0437	-.0453	-.0246	.0861	.3817			

MACH (1) = 2.500 ALPHA (3) = 12.000 RN/L = 2.4999 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.0771	.0640	.0317												
70.000	.0684	.0538	.0421												
60.000	.0684	.0567	.0538												
50.000			.0625	-.0075	-.0639	-.0796	-.0780	-.0733	-.0671	-.0671	-.0655	-.0671	-.0714	-.0732	-.0809
100.000						-.0671	-.0639	-.0608	-.0623	-.0639	-.0655	-.0702	-.0769	-.0802	-.0837
110.000						-.0702	-.0733	-.0718	-.0733	-.0812	-.0859	-.0888	-.0941	-.0959	-.0975
120.000						-.0655								-.1238	
130.000						-.1141								-.0994	
140.000						-.1549								-.0959	
150.000						-.1502								-.1011	
160.000						-.1486								-.1011	
170.000						-.1455								-.1064	
180.000						-.1470	-.1439	-.1376	-.1345	-.1298	-.1282	-.1291	-.1258	-.1203	-.1133

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6920	.7100
PHI															
90.000	-.0802	-.0854	-.0889	-.0905	-.0941	-.0976	-.1016	-.1047	-.1031	-.1078	-.1047	-.1063	-.1000	-.0984	-.0984
100.000	-.0889	-.0906	-.0941	-.0959	-.0941	-.1011	-.1016	-.1031	-.1016	-.1000	-.0953	-.0906	-.0859	-.0859	-.0822
110.000	-.0994	-.1011	-.1046	-.1064	-.1029	-.0994	-.0937	-.0890	-.0843	-.0796	-.0765	-.0733	-.0718	-.0686	-.0672
120.000						-.0889								-.0639	
130.000						-.0592								-.0561	
140.000						-.0498								-.0435	
150.000						-.0514								-.0435	

OA64 ORBITER ENTRY CONFIGURATION (RQ4001)

MACH (1) = 2.500 ALPHA (3) = 12.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4300	.4480	.4660	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
160.000						-.0608								-.0498	
170.000						-.0733								-.0498	
180.000	-.1099	-.1084	-.0994	-.0941	-.0889	-.0780	-.0718	-.0639	-.0576	-.0529	-.0498	-.0529	-.0498	-.0514	-.0643

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1716		
70.000							-.1570	-.1651	-.1407
80.000							-.1293	-.1424	-.1521
90.000	-.0968	-.1082	-.1163	-.1163	-.1131	-.0903	-.0984	-.1163	-.1277
100.000	-.3757	-.0968	-.0871	-.1115	-.0578	-.0773			
110.000	-.0659	-.0627	-.0627	-.0330	-.0008	-.0334			
120.000						.0650			
130.000						.0939			
140.000						.2092			
150.000						.1861			
160.000						.1976			
170.000						.1847			
180.000	-.0913	-.0610	-.0708	-.0822	-.0074	.4585			

MACH (1) = 2.500 ALPHA (4) = 14.000 RN/L = 2.4999 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0749	.0545	.0296												
70.000	.0374	.0516	.0358												
80.000	.0531	.0501	.0487												
90.000			.0560	-.0049	-.0627	-.0800	-.0753	-.0706	-.0690	-.0690	-.0706	-.0721	-.0760	-.0778	-.0850
100.000						-.0737	-.0690	-.0690	-.0706	-.0721	-.0737	-.0737	-.0778	-.0795	-.0865
110.000						-.0627	-.0643	-.0690	-.0706	-.0800	-.0831	-.0865	-.0901	-.0936	-.1006
120.000						-.0627								-.1409	
130.000						-.1175								-.1076	
140.000						-.1597								-.0936	
150.000						-.1550								-.0971	
160.000						-.1519								-.1006	
170.000						-.1519								-.1076	
180.000						-.1519	-.1504	-.1457	-.1425	-.1394	-.1378	-.1391	-.1356	-.1321	-.1304

X/L	.4300	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															

OA64 ORBITER ENTRY CONFIGURATION (RQ40D1)

MACH (1) = 2.500 ALPHA (4) = 14.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0865	-.0883	-.0883	-.0936	-.0936	-.0988	-.1042	-.1090	-.1105	-.1137	-.1153	-.1200	-.1216	-.1231	-.1272
100.000	-.0918	-.0953	-.0953	-.0971	-.0988	-.1023	-.1027	-.1074	-.1090	-.1090	-.1090	-.1105	-.1042	-.1058	-.1003
110.000	-.1058	-.1093	-.1111	-.1111	-.1076	-.1076	-.1090	-.1090	-.1042	-.0964	-.0916	-.0869	-.0822	-.0791	-.0797
120.000						-.0971								-.0665	
130.000						-.0822								-.0775	
140.000						-.0617								-.0555	
150.000						-.0555								-.0492	
160.000						-.0586								-.0570	
170.000						-.0743								-.0665	
180.000	-.1251	-.1181	-.1076	-.0936	-.0813	-.0712	-.0696	-.0665	-.0712	-.0743	-.0743	-.0791	-.0948	-.0964	-.1146

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1858		
70.000							-.1827	-.1890	-.1621
80.000							-.1573	-.1700	-.1747
90.000	-.1272	-.1352	-.1415	-.1431	-.1333	-.1193	-.1320	-.1462	-.1526
100.000	-.0956	-.1067	-.1098	-.1098	-.0797	-.1082			
110.000	-.0782	-.0797	-.0797	-.0544	-.0259	-.0576			
120.000						.0442			
130.000						.0775			
140.000						.1541			
150.000						.2163			
160.000						.0616			
170.000						.1729			
180.000	-.1130	-.1177	-.1257	-.1304	-.0829	.1614			

MACH (1) = 2.500 ALPHA (5) = 16.010 RN/L = 2.4999 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0735	.0444	.0280												
70.000	.0502	.0444	.0280												
80.000	.0371	.0414	.0385												
90.000			.0473	-.0003	-.0617	-.0775	-.0759	-.0727	-.0727	-.0727	-.0759	-.0790	-.0857	-.0892	-.0910
100.000						-.0775	-.0743	-.0712	-.0696	-.0727	-.0743	-.0775	-.0840	-.0892	-.0892
110.000						-.0617	-.0517	-.0680	-.0743	-.0838	-.0869	-.0927	-.0979	-.1014	-.1084
120.000						-.0602								-.1502	
130.000						-.1168								-.1241	
140.000						-.1672								-.1032	
150.000						-.1609								-.0944	

OA64 ORBITER ENTRY CONFIGURATION (RQ4001)

MACH (1) = 2.500 ALPHA (5) = 16.010

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0370	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
160.000						-.1577								-.1014	
170.000						-.1577								-.1014	
180.000						-.1577	-.1562	-.1514	-.1499	-.1467	-.1483	-.1502	-.1467	-.1467	-.1415

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0910	-.0927	-.0962	-.0979	-.0979	-.1032	-.1090	-.1121	-.1168	-.1247	-.1310	-.1389	-.1420	-.1452	-.1553
100.000	-.0927	-.0944	-.0962	-.0979	-.0979	-.1014	-.1042	-.1074	-.1090	-.1090	-.1137	-.1152	-.1152	- 1168	-.1186
110.000	-.1084	-.1066	-.1066	-.1084	-.1101	-.1119	-.1121	-.1121	-.1090	-.1074	-.1011	-.0964	-.0932	-.0901	-.0884
120.000						-.1119								-.0727	
130.000						-.1200								-.0869	
140.000						-.0806								-.0759	
150.000						-.0617								-.0617	
160.000						-.0633								-.0617	
170.000						-.0759								-.0869	
180.000	-.1432	-.1502	-.1450	-.1380	-.1363	-.1514	-.1577	-.1656	-.1540	-.1719	-.1735	-.1719	-.1703	-.1656	-.1633

X/L	.7290	.7470	.7650	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1919		
70.000							-.2031	-.1951	-.1776
80.000							-.1887	-.1967	-.1887
90.000	-.1585	-.1680	-.1712	-.1744	-.1696	-.1553	-.1680	-.1744	-.1840
100.000	-.1155	-.1282	-.1314	-.1346	-.1107	-.1425			
110.000	-.0900	-.0932	-.0995	-.0724	-.0485	-.0836			
120.000						.0356			
130.000						.0056			
140.000						.0760			
150.000						.1973			
160.000						.0544			
170.000						.1468			
180.000	-.1537	-.1521	-.1521	-.1298	-.0836	.1396			

OA64 ORBITER ENTRY CONFIGURATION (RQ4001)

MACH (1) = 2.500 ALPHA (6) = 17.990 RN/L = 2.4999 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.0687	.0338	.0276												
70.000	.0382	.0398	.0229												
80.000	.0197	.0276	.0244												
90.000			.0338	-.0024	-.0641	-.0799	-.0783	-.0768	-.0783	-.0815	-.0863	-.0878	-.0894	-.0894	-.0929
100.000						-.0768	-.0752	-.0752	-.0768	-.0815	-.0863	-.0894	-.0894	-.0912	-.0946
110.000						-.0720	-.0752	-.0799	-.0847	-.0926	-.0973	-.1033	-.1051	-.1033	-.1033
120.000						-.0673								-.1660	
130.000						-.1210								-.1346	
140.000						-.1732								-.1155	
150.000						-.1685								-.0946	
160.000						-.1637								-.0999	
170.000						-.1637								-.1051	
180.000						-.1653	-.1622	-.1574	-.1558	-.1574	-.1590	-.1590	-.1590	-.1538	-.1590

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0948	-.0981	-.0981	-.1016	-.1051	-.1120	-.1185	-.1264	-.1374	-.1484	-.1563	-.1673	-.1736	-.1783	-.1941
100.000	-.0964	-.0981	-.0981	-.0999	-.1033	-.1033	-.1060	-.1091	-.1123	-.1154	-.1201	-.1248	-.1280	-.1327	-.1465
110.000	-.1051	-.1068	-.1085	-.1103	-.1120	-.1120	-.1138	-.1138	-.1107	-.1075	-.1028	-.0997	-.1013	-.1028	-.1104
120.000						-.1207								-.0792	
130.000						-.1327								-.0855	
140.000						-.1028								-.0934	
150.000						-.0651								-.0840	
160.000						-.0651								-.0871	
170.000						-.0918								-.1123	
180.000	-.1842	-.1694	-.1694	-.1660	-.1746	-.1846	-.1893	-.1893	-.1877	-.1814	-.1814	-.1798	-.1783	-.1720	-.1744

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.2072		
70.000							-.2154	-.2072	-.1990
80.000							-.2122	-.2154	-.2023
90.000	-.1990	-.2007	-.2072	-.2138	-.2089	-.1941	-.1990	-.2056	-.2089
100.000	-.1584	-.1695	-.1761	-.1793	-.1613	-.1826			
110.000	-.1153	-.1235	-.1268	-.1104	-.0842	-.1252			
120.000						.0367			
130.000						.0439			
140.000						.0511			
150.000						.1548			
160.000						.0291			
170.000						.1202			
180.000	-.1662	-.1629	-.1596	-.1334	-.0956	.1245			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1083) (RQ4001)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (7) = 20.000 RN/L = 2.4999 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0630	.0216	.0247												
70.000	.0232	.0309	.0170												
80.000	.0031	.0093	.0108												
90.000			.0139	-.0139	-.0693	-.0849	-.0834	-.0819	-.0834	-.0865	-.0880	-.0896	-.0920	-.0903	-.0972
100.000						-.0788	-.0788	-.0788	-.0834	-.0880	-.0896	-.0896	-.0920	-.0903	-.0972
110.000						-.0741	-.0772	-.0834	-.0896	-.0973	-.1004	-.1024	-.1024	-.1024	-.0972
120.000						-.0834								-.1750	
130.000						-.1174								-.1439	
140.000						-.1699								-.1370	
150.000						-.1683								-.0955	
160.000						-.1637								-.1007	
170.000						-.1653								-.1145	
180.000						-.1653	-.1606	-.1560	-.1560	-.1560	-.1560	-.1646	-.1629	-.1681	-.1733

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0937	-.0972	-.1041	-.1093	-.1179	-.1283	-.1379	-.1567	-.1692	-.1817	-.1926	-.1973	-.1989	-.2051	-.2142
100.000	-.0972	-.0972	-.0972	-.0989	-.0989	-.1041	-.1051	-.1145	-.1223	-.1301	-.1395	-.1457	-.1551	-.1614	-.1773
110.000	-.1058	-.1076	-.1076	-.1076	-.1093	-.1093	-.1082	-.1082	-.1082	-.1067	-.1067	-.1067	-.1114	-.1176	-.1293
120.000						-.1231								-.0879	
130.000						-.1285								-.0957	
140.000						-.1270								-.1067	
150.000						-.0801								-.1067	
160.000						-.0723								-.1067	
170.000						-.1160								-.1270	
180.000	-.1750	-.1767	-.1784	-.1784	-.1854	-.1911	-.1926	-.1895	-.1911	-.1879	-.1864	-.1832	-.1707	-.1629	-.1661

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.2046		
70.000							-.2142	-.2110	-.1981
80.000							-.2206	-.2094	-.1981
90.000	-.2158	-.2222	-.2222	-.2190	-.2142	-.2110	-.2142	-.2142	-.2078
100.000	-.1885	-.1985	-.1997	-.1981	-.1901	-.2013			
110.000	-.1373	-.1485	-.1549	-.1517	-.1437	-.1741			
120.000						-.0220			
130.000						.0425			
140.000						.0052			
150.000						.1331			
160.000						.0228			
170.000						.1044			
180.000	-.1597	-.1581	-.1549	-.1277	-.0941	.1130			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4001)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (8) = 20.990 RN/L = 2.4999 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.0589	.0156	.0249												
70.000	.0140	.0280	.0156												
80.000	-.0078	.0016	.0062												
90.000			.0062	-.0202	-.0731	-.0886	-.0871	-.0855	-.0886	-.0902	-.0917	-.0902	-.0927	-.0927	-.0962
100.000						-.0840	-.0824	-.0840	-.0871	-.0902	-.0902	-.0917	-.0945	-.0927	-.0997
110.000						-.0777	.0809	-.0855	-.0933	-.0995	-.1011	-.1049	-.1049	-.1049	-.1014
120.000						-.0886								-.1798	
130.000						-.1197								-.1502	
140.000						-.1726								-.1467	
150.000						-.1710								-.1014	
160.000						-.1664								-.1014	
170.000						-.1664								-.1189	
180.000						-.1679	-.1633	-.1586	-.1570	-.1539	-.1570	-.1659	-.1694	-.1746	-.1763

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0945	-.1014	-.1119	-.1258	-.1363	-.1519	-.1676	-.1770	-.1910	-.2004	-.2082	-.2129	-.2145	-.2176	-.2253
100.000	-.0980	-.0997	-.0980	-.0997	-.1014	-.1064	-.1128	-.1206	-.1316	-.1441	-.1582	-.1707	-.1801	-.1895	-.2028
110.000	-.1084	-.1101	-.1084	-.1084	-.1032	-.1084	-.1081	-.1097	-.1128	-.1128	-.1144	-.1159	-.1253	-.1500	-.1463
120.000						-.1241								-.0940	
130.000						-.1332								-.1003	
140.000						-.1394								-.1056	
150.000						-.0940								-.1175	
160.000						-.0815								-.1175	
170.000						-.1191								-.1347	
180.000	-.1763	-.1763	-.1781	-.1798	-.1868	-.1895	-.1895	-.1863	-.1895	-.1879	-.1863	-.1801	-.1723	-.1691	-.1705

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.2076		
70.000							-.2157	-.2044	-.2028
80.000							-.2173	-.2092	-.2092
90.000	-.2253	-.2253	-.2253	-.2253	-.2221	-.2221	-.2205	-.2124	-.2124
100.000	-.2092	-.2141	-.2157	-.2124	-.2076	-.2157			
110.000	-.1808	-.1705	-.1818	-.1770	-.1705	-.1995			
120.000						-.0528			
130.000						.0310			
140.000						-.0044			
150.000						.1189			
160.000						.0198			
170.000						.0945			
180.000	-.1808	-.1808	-.1528	-.1270	-.0963	.1074			

OA64 ORBITER ENTRY CONFIGURATION (RQ4001)

MACH (2) = 2.950 ALPHA (1) = 8.010 FN/L = 2.5124 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0668	.1275	.0359												
70.000	.0919	.0613	.0444												
80.000	.1037	.0681	.0529												
90.000			.0613	.0071	-.0438	-.0373	-.0607	-.0573	-.0540	-.0540	-.0523	-.0523	-.0574	-.0593	-.0612
100.000						-.0489	-.0489	-.0506	-.0540	-.0540	-.0557	-.0557	-.0612	-.0612	-.0612
110.000						-.0624	-.0658	-.0692	-.0658	-.0641	-.0658	-.0708	-.0708	-.0708	-.0708
120.000						-.0421								-.0917	
130.000						-.0692								-.0938	
140.000						-.0963								-.0860	
150.000						-.0946								-.0803	
160.000						-.0946								-.0784	
170.000						-.0929								-.0784	
180.000						-.0929	-.0896	-.0862	-.0862	-.0828	-.0828	-.0860	-.0860	-.0841	-.0822

X/L	.4500	.4680	.4960	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0631	-.0650	-.0650	-.0670	-.0689	-.0708	-.0704	-.0704	-.0704	-.0704	-.0687	-.0652	-.0635	-.0549	-.0588
100.000	-.0631	-.0631	-.0650	-.0650	-.0670	-.0670	-.0704	-.0704	-.0704	-.0687	-.0687	-.0652	-.0635	-.0548	-.0535
110.000	-.0708	-.0708	-.0708	-.0650	-.0384	-.0631	-.0620	-.0565	-.0617	-.0531	-.0531	-.0531	-.0513	-.0548	-.0482
120.000						-.0498								-.0392	
130.000						-.0427								-.0392	
140.000						-.0461								-.0392	
150.000						-.0548								-.0392	
160.000						-.0617								-.0427	
170.000						-.0687								-.0513	
180.000	-.0803	-.0765	-.0746	-.0708	-.0708	-.0704	-.0704	-.0704	-.0687	-.0687	-.0652	-.0635	-.0531	-.0583	-.0588

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0939		
70.000							-.0798	-.0816	-.0588
80.000							-.0623	-.0658	-.0781
90.000	-.0570	-.0623	-.0640	-.0693	-.0623	-.0377	-.0570	-.0552	-.0693
100.000	-.0482	-.0517	-.0535	-.0535	-.0324	-.0342			
110.000	-.0482	-.0429	-.0394	-.0166	.0098	-.0148			
120.000						.0695			
130.000						.1500			
140.000						.2290			
150.000						.1468			
160.000						.1134			
170.000						.1420			
180.000	-.0482	-.0429	-.0447	-.0412	-.0236	.1533			

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(R04001)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (2) = 10.000 RN/L = 2.5124 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0823	.0979	.0337												
70.000	.0823	.0580	.0424												
80.000	.0857	.0632	.0528												
90.000			.0614	.0076	-.0514	-.0618	-.0618	-.0600	-.0583	-.0566	-.0583	-.0583	-.0611	-.0611	-.0631
100.000						-.0531	-.0531	-.0514	-.0531	-.0548	-.0566	-.0583	-.0611	-.0611	-.0631
110.000						-.0566	-.0600	-.0618	-.0618	-.0652	-.0687	-.0709	-.0728	-.0728	-.0747
120.000						-.0461								-.0922	
130.000						-.0757								-.0942	
140.000						-.1069								-.0903	
150.000						-.1052								-.0845	
160.000						-.1052								-.0825	
170.000						-.1034								-.0845	
180.000						-.1034	-.1017	-.0982	-.0965	-.0947	-.0947	-.0942	-.0922	-.0922	-.0903

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0650	-.0670	-.0709	-.0709	-.0728	-.0747	-.0740	-.0758	-.0740	-.0793	-.0793	-.0776	-.0793	-.0723	-.0765
100.000	-.0650	-.0670	-.0728	-.0709	-.0728	-.0747	-.0740	-.0758	-.0740	-.0740	-.0723	-.0705	-.0670	-.0652	-.0658
110.000	-.0747	-.0747	-.0747	-.0767	-.0670	-.0767	-.0740	-.0758	-.0687	-.0652	-.0624	-.0652	-.0581	-.0564	-.0586
120.000						-.0611								-.0564	
130.000						-.0458								-.0440	
140.000						-.0458								-.0440	
150.000						-.0511								-.0440	
160.000						-.0617								-.0440	
170.000						-.0705								-.0440	
180.000	-.0884	-.0864	-.0825	-.0825	-.0825	-.0829	-.0740	-.0758	-.0740	-.0705	-.0776	-.0793	-.0793	-.0882	-.0926

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1194		
70.000							-.1051	-.1105	-.0926
80.000							-.0801	-.0890	-.0998
90.000	-.0729	-.0801	-.0819	-.0855	-.0801	-.0568	-.0568	-.0729	-.0837
100.000	-.0840	-.0640	-.0640	-.0622	-.0461	-.0515			
110.000	-.0674	-.0622	-.0497	-.0318	-.0014	-.0121			
120.000						.0344			
130.000						.1386			
140.000						.1965			
150.000						.1290			
160.000						.1041			
170.000						.1595			
180.000	-.0837	-.0819	-.0747	-.0711	-.0586	.1772			

Oa64 ORBITER ENTRY CONFIGURATION (R04001)

MACH (2) = 2.950 ALPHA (3) = 12.000 RN/L = 2.5124 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0809	.0753	.05.9												
70.000	.0701	.0528	.0371												
80.000	.0684	.0545	.0476												
90.000			.0580	.0094	-.0514	-.0635	-.0635	-.0600	-.0583	-.0583	-.0583	-.0583	-.0670	-.0670	-.0728
100.000						-.0618	-.0583	-.0583	-.0583	-.0600	-.0618	-.0635	-.0689	-.0670	-.0728
110.000						-.0531	-.0566	-.0566	-.0583	-.0652	-.0670	-.0748	-.0748	-.0767	-.0786
120.000						-.0462								-.1039	
130.000						-.0791								-.1039	
140.000						-.1121								-.0942	
150.000						-.1104								-.0903	
160.000						-.1086								-.0903	
170.000						-.1086								-.0961	
180.000						-.1086	-.1069	-.1034	-.1034	-.1034	-.1017	-.1058	-.1058	-.1058	-.1039

X/L	.4300	.4480	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0748	-.0767	-.0767	-.0786	-.0806	-.0845	-.0809	-.0845	-.0863	-.0881	-.0881	-.0881	-.0899	-.0917	-.0895
100.000	-.0748	-.0767	-.0767	-.0825	-.0845	-.0845	-.0809	-.0827	-.0863	-.0881	-.0845	-.0881	-.0845	-.0809	-.0788
110.000	-.0845	-.0845	-.0884	-.0905	-.0806	-.0884	-.0809	-.0827	-.0790	-.0772	-.0754	-.0718	-.0700	-.0664	-.0664
120.000						-.0884								-.0555	
130.000						-.0537								-.0555	
140.000						-.0501								-.0519	
150.000						-.0519								-.0483	
160.000						-.0609								-.0483	
170.000						-.0772								-.0483	
180.000	-.1039	-.1020	-.0981	-.0961	-.0942	-.0917	-.1009	-.1080	-.1189	-.1189	-.1298	-.1298	-.1207	-.1243	-.1250

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1375		
70.000							-.1250	-.1286	-.1144
80.000							-.1002	-.1108	-.1197
90.000	-.0877	-.0931	-.0984	-.0984	-.0918	-.0717	-.0771	-.0913	-.0984
100.000	-.0735	-.0771	-.0771	-.0771	-.0559	-.0664			
110.000	-.0628	-.0628	-.0611	-.0415	-.0095	-.0237			
120.000						.0697			
130.000						.0705			
140.000						.1563			
150.000						.1434			
160.000						.0883			
170.000						.1386			
180.000	-.1197	-.1197	-.1162	-.0948	-.0557	.1836			

OA84 ORBITER ENTRY CONFIGURATION (R04001)

MACH (2) = 2.950 ALPHA (4) = 14.000 RN/L = 2.5124 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0819	.0593	.0313												
70.000	.0627	.0505	.0331												
80.000	.0540	.0470	.0453												
90.000			.0540	.0104	-.0490	-.0612	-.0612	-.0594	-.0577	-.0577	-.0612	-.0629	-.0709	-.0748	-.0748
100.000						-.0629	-.0629	-.0612	-.0594	-.0594	-.0612	-.0629	-.0709	-.0728	-.0748
110.000						-.0490	-.0525	-.0542	-.0577	-.0629	-.0682	-.0767	-.0767	-.0845	-.0864
120.000						-.0455								-.1117	
130.000						-.0821								-.1000	
140.000						-.1170								-.0942	
150.000						-.1153								-.0884	
160.000						-.1135								-.0903	
170.000						-.1135								-.0961	
180.000						-.1135	-.1100	-.1083	-.1083	-.1066	-.1083	-.1156	-.1156	-.1156	-.1136

X/L	.4300	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0787	-.0787	-.0787	-.0825	-.0845	-.0845	-.0860	-.0895	-.0913	-.0913	-.0931	-.0966	-.1002	-.1020	-.1037
100.000	-.0787	-.0787	-.0787	-.0806	-.0845	-.0845	-.0860	-.0895	-.0913	-.0913	-.0895	-.0895	-.0913	-.0913	-.0877
110.000	-.0923	-.0942	-.0942	-.0903	-.0825	-.0923	-.0860	-.0877	-.0913	-.0877	-.0842	-.0806	-.0788	-.0771	-.0700
120.000						-.0903								-.0646	
130.000						-.0788								-.0735	
140.000						-.0628								-.0575	
150.000						-.0575								-.0522	
160.000						-.0575								-.0522	
170.000						-.0948								-.0877	
180.000	-.1158	-.1156	-.1156	-.1136	-.1136	-.1233	-.1304	-.1322	-.1393	-.1411	-.1446	-.1464	-.1482	-.1517	-.1411

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1411		
70.000							-.1393	-.1411	-.1286
80.000							-.1251	-.1357	-.1357
90.000	-.1037	-.1144	-.1144	-.1162	-.1144	-.0948	-.1055	-.1162	-.1215
100.000	-.0842	-.0877	-.0877	-.0877	-.0682	-.0877			
110.000	-.0700	-.0682	-.0682	-.0469	-.0202	-.0381			
120.000						.0527			
130.000						.0331			
140.000						.0953			
150.000						.1434			
160.000						.0491			
170.000						.0900			
180.000	-.1322	-.1293	-.1268	-.1037	-.0717	.1007			

OA64 ORBITER ENTRY CONFIGURATION (RQ4001)

MACH (2) = 2.950 ALPHA (5) = 16.000 RN/L = 2.5124 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0720	.0407	.0286												
70.000	.0494	.0424	.0251												
80.000	.0372	.0335	.0355												
90.000			.0459	.0077	-.0478	-.0617	-.0617	-.0600	-.0600	-.0617	-.0652	-.0687	-.0728	-.0747	-.0788
100.000						-.0635	-.0617	-.0583	-.0600	-.0617	-.0652	-.0687	-.0747	-.0747	-.0788
110.000						-.0513	-.0548	-.0583	-.0635	-.0687	-.0721	-.0786	-.0844	-.0883	-.0903
120.000						-.0461								-.1138	
130.000						-.0826								-.1039	
140.000						-.1190								-.0961	
150.000						-.1173								-.0844	
160.000						-.1173								-.0883	
170.000						-.1155								-.0942	
180.000						-.1155	-.1155	-.1121	-.1121	-.1138	-.1155	-.1214	-.1214	-.1214	-.1233

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0787	-.0786	-.0825	-.0825	-.0825	-.0844	-.0921	-.0921	-.0957	-.1011	-.1083	-.1137	-.1191	-.1245	-.1253
100.000	-.0787	-.0786	-.0825	-.0825	-.0825	-.0825	-.0885	-.0903	-.0903	-.0921	-.0921	-.0957	-.0957	-.0993	-.0952
110.000	-.0884	-.0864	-.0844	-.0864	-.0825	-.0903	-.0885	-.0903	-.0957	-.0939	-.0903	-.0885	-.0849	-.0849	-.0775
120.000						-.0961								-.0741	
130.000						-.1065								-.0813	
140.000						-.0813								-.0777	
150.000						-.0705								-.0651	
160.000						-.0705								-.0651	
170.000						-.1047								-.1055	
180.000	-.1272	-.1292	-.1292	-.1292	-.1330	-.1462	-.1516	-.1534	-.1516	-.1570	-.1606	-.1606	-.1552	-.1534	-.1323

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1447		
70.000							-.1482	-.1412	-.1376
80.000							-.1465	-.1465	-.1412
90.000	-.1253	-.1323	-.1341	-.1323	-.1359	-.1359	-.1323	-.1323	-.1394
100.000	-.0970	-.1058	-.1111	-.1111	-.1076	-.1253			
110.000	-.0793	-.0828	-.0846	-.0722	-.0528	-.0546			
120.000						.0586			
130.000						.0303			
140.000						.0497			
150.000						.1340			
160.000						.0020			
170.000						.0533			
180.000	-.1343	-.1233	-.1129	-.0952	-.0193	.0497			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4001)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (6) = 18.000 RN/L = 2.5124 BETA = 6.0300

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0899	.0280	.0297												
70.000	.0402	.0402	.0228												
80.000	.0245	.0280	.0245			-.0628	-.0628	-.0626	-.0646	-.0681	-.0698	-.0716	-.0766	-.0747	-.0766
90.000			.0350	.0053	-.0471	-.0611	-.0611	-.0611	-.0646	-.0681	-.0698	-.0733	-.0766	-.0747	-.0766
100.000						-.0576	-.0611	-.0646	-.0681	-.0751	-.0803	-.0844	-.0864	-.0844	-.0844
110.000						-.0558								-.1291	
120.000						-.0873								-.1116	
130.000						-.1122								-.1019	
140.000						-.1222								-.0844	
150.000						-.1222								-.0883	
160.000						-.1205								-.0980	
170.000						-.1222	-.1187	-.1187	-.1187	-.1222	-.1240	-.1291	-.1272	-.1251	-.1330
180.000															

X/L	.4500	.4680	.4830	.5030	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0788	-.0788	-.0786	-.0805	-.0825	-.0864	-.0948	-.1019	-.1108	-.1215	-.1304	-.1339	-.1428	-.1464	-.1481
100.000	-.0747	-.0786	-.0786	-.0805	-.0805	-.0825	-.0859	-.0877	-.0894	-.0930	-.0983	-.1072	-.1072	-.1126	-.1161
110.000	-.0827	-.0864	-.0864	-.0864	-.0805	-.0883	-.0841	-.0912	-.0912	-.0877	-.0859	-.0859	-.0841	-.0859	-.0859
120.000						-.1019								-.0770	
130.000						-.1108								-.0826	
140.000						-.0948								-.0859	
150.000						-.0699								-.0788	
160.000						-.0752								-.0770	
170.000						-.1108								-.1126	
180.000	-.1330	-.1330	-.1330	-.1330	-.1389	-.1481	-.1464	-.1553	-.1553	-.1553	-.1517	-.1499	-.1419	-.1428	-.1339

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.1499		
60.000							-.1499	-.1499	-.1499
70.000							-.1553	-.1499	-.1481
80.000							-.1517	-.1499	-.1481
90.000	-.1481	-.1499	-.1517	-.1517	-.1517	-.1517			
100.000	-.1215	-.1304	-.1357	-.1339	-.1339	-.1481			
110.000	-.0912	-.1001	-.1055	-.0966	-.0859	-.0933			
120.000						.0475			
130.000						.0582			
140.000						.0280			
150.000						.1080			
160.000						-.0201			
170.000						.0280			
180.000	-.1268	-.1161	-.1055	-.0966	-.0859	.0546			

OA64 ORBITER ENTRY CONFIGURATION (RQ4001)

MACH (2) = 2.950 ALPHA (7) = 20.010 RN/L = 2.5124 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0661	.0138	.0295												
70.000	.0277	.0347	.0225												
80.000	.0103	.0138	.0135												
90.000			.0208	-.0054	-.0525	-.0665	-.0665	-.0665	-.0682	-.0717	-.0752	-.0752	-.0754	-.0754	-.0754
100.000						-.0647	-.0647	-.0665	-.0682	-.0717	-.0752	-.0752	-.0754	-.0754	-.0735
110.000						-.0595	-.0630	-.0682	-.0752	-.0804	-.0822	-.0812	-.0812	-.0812	-.0812
120.000						-.0647								-.1333	
130.000						-.0891								-.1140	
140.000						-.1240								-.1121	
150.000						-.1258								-.0812	
160.000						-.1240								-.0851	
170.000						-.1240								-.1005	
180.000						-.1240	-.1223	-.1223	-.1240	-.1293	-.1310	-.1314	-.1333	-.1371	-.1333

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0735	-.0754	-.0812	-.0870	-.0947	-.1121	-.1205	-.1293	-.1380	-.1450	-.1502	-.1554	-.1554	-.1589	-.1523
100.000	-.0735	-.0754	-.0812	-.0773	-.0773	-.0812	-.0857	-.0891	-.0909	-.1014	-.1118	-.1240	-.1362	-.1380	-.1464
110.000	-.0831	-.0831	-.0812	-.0831	-.0773	-.0831	-.0839	-.0822	-.0822	-.0839	-.0857	-.0891	-.0891	-.0926	-.1020
120.000						-.1005								-.0752	
130.000						-.1066								-.0822	
140.000						-.1083								-.0874	
150.000						-.0769								-.0909	
160.000						-.0769								-.0909	
170.000						-.1118								-.1171	
180.000	-.1333	-.1314	-.1314	-.1314	-.1333	-.1380	-.1415	-.1450	-.1485	-.1467	-.1432	-.1380	-.1345	-.1328	-.1251

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1499		
70.000							-.1535	-.1517	-.1482
80.000							-.1535	-.1499	-.1517
90.000	-.1606	-.1606	-.1571	-.1553	-.1553	-.1588	-.1571	-.1499	-.1517
100.000	-.1517	-.1553	-.1553	-.1553	-.1553	-.1553			
110.000	-.1128	-.1251	-.1286	-.1269	-.1215	-.1446			
120.000						-.0025			
130.000						.0437			
140.000						.0028			
150.000						.0703			
160.000						-.0203			
170.000						.0064			
180.000	-.1197	-.1126	-.1038	-.0984	-.0878	.0259			

OA64 ORBITER ENTRY CONFIGURATION (RG34001)

MACH (2) = 2.950 ALPHA (8) = 20.940 RN/L = 2.3124 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4080	.4310
PHI															
60.000	.0832	.0059	.0302												
70.000	.0233	.0337	.0216												
80.000	.0142	.0077	.0129												
90.000			.0129	-.0097	-.0531	-.0687	-.0687	-.0687	-.0687	-.0720	-.0756	-.0756	-.0753	-.0753	-.0753
100.000						-.0652	-.0670	-.0670	-.0704	-.0739	-.0756	-.0739	-.0773	-.0753	-.0753
110.000						-.0618	-.0652	-.0687	-.0756	-.0791	-.0808	-.0831	-.0811	-.0811	-.0831
120.000						-.0687								-.1352	
130.000						-.0878								-.1836	
140.000						-.1260								-.2178	
150.000						-.1260								-.2431	
160.000						-.1242								-.2269	
170.000						-.1225								-.2024	
180.000						-.1242	-.1225	-.1225	-.1260	-.1312	-.1312	-.1352	-.1391	-.1391	-.1352

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6910	.7100
PHI															
60.000	-.0773	-.0811	-.0869	-.0908	-.1004	-.1176	-.1292	-.1415	-.1467	-.1510	-.1554	-.1589	-.1607	-.1625	-.1608
70.000	-.0773	-.0811	-.0773	-.0773	-.0811	-.0950	-.0891	-.0878	-.1065	-.1188	-.1292	-.1380	-.1432	-.1431	-.1519
80.000	-.0831	-.0811	-.0831	-.0831	-.0811	-.0850	-.0821	-.0821	-.0878	-.0908	-.0943	-.0861	-.1013	-.1013	-.1184
90.000						-.1004								-.0753	
100.000						-.1065								-.0736	
110.000						-.1118								-.0753	
120.000						-.0856								-.0811	
130.000						-.0821								-.0861	
140.000						-.1179								-.1189	
150.000	-.1333	-.1294	-.1275	-.1333	-.1333	-.1380	-.1380	-.1450	-.1467	-.1450	-.1432	-.1397	-.1362	-.1327	-.1289

X/L	.7250	.7470	.7570	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.1448		
70.000							-.1483	-.1483	-.1466
80.000							-.1483	-.1483	-.1483
90.000	-.1536	-.1589	-.1571	-.1536	-.1571	-.1536	-.1483	-.1483	-.1483
100.000	-.1536	-.1589	-.1571	-.1554	-.1536	-.1536			
110.000	-.1343	-.1396	-.1431	-.1396	-.1378	-.1519			
120.000						-.0377			
130.000						.0326			
140.000						-.0061			
150.000						.0537			
160.000						-.0201			
170.000						.0062			
180.000	-.1185	-.1132	-.1044	-.0939	-.0869	.0343			

C-5

OA64 ORBITER ENTRY CONFIGURATION (P24001)

MACH (3) = 4.000 ALPHA (1) = 7.990 RN/L = 3.4940 BETA = 6.0900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0828	.1090	.0338												
70.000	.0977	.0549	.0402												
80.000	.0943	.0615	.0484												
90.000			.0549	.0140	-.0257	-.0352	-.0368	-.0385	-.0385	-.0368	-.0368	-.0368	-.0398	-.0416	-.0434
100.000						-.0319	-.0319	-.0319	-.0336	-.0336	-.0368	-.0368	-.0398	-.0398	-.0434
110.000						-.0368	-.0385	-.0418	-.0418	-.0401	-.0385	-.0434	-.0434	-.0453	-.0453
120.000						-.0155									
130.000						-.0319								-.0563	
140.000						-.0500								-.0563	
150.000						-.0516								-.0544	
160.000						-.0516								-.0526	
170.000						-.0516								-.0526	
180.000						-.0483	-.0483	-.0500	-.0483	-.0483	-.0500	-.0526	-.0526	-.0508	

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0434	-.0434	-.0453	-.0453	-.0453	-.0453	-.0481	-.0481	-.0481	-.0481	-.0481	-.0464	-.0464	-.0464	-.0507
100.000	-.0434	-.0434	-.0434	-.0453	-.0453	-.0453	-.0481	-.0481	-.0481	-.0464	-.0464	-.0464	-.0464	-.0448	-.0473
110.000	-.0453	-.0453	-.0453	-.0453	-.0214	-.0453	-.0481	-.0481	-.0481	-.0481	-.0464	-.0464	-.0398	-.0448	-.0456
120.000						-.0379								-.0316	
130.000						-.0365								-.0316	
140.000						-.0415								-.0349	
150.000						-.0448								-.0448	
160.000						-.0448								-.0497	
170.000						-.0481									
180.000	-.0526	-.0526	-.0526	-.0526	-.0508	-.0481	-.0481	-.0464	-.0481	-.0464	-.0464	-.0464	-.0497	-.0497	-.0540

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0675		
70.000							-.0591	-.0540	-.0507
80.000							-.0473	-.0490	-.0524
90.000	-.0490	-.0524	-.0507	-.0524	-.0507	-.0389	-.0356	-.0406	-.0440
100.000	-.0473	-.0456	-.0440	-.0423	-.0356	-.0305			
110.000	-.0440	-.0440	-.0440	-.0322	-.0188	-.0272			
120.000						.0366			
130.000						.0702			
140.000						.1457			
150.000						.0685			
160.000						-.0305			
170.000						-.0255			
180.000	-.0540	-.0524	-.0524	-.0507	-.0490	-.0372			

OA64 ORBITER ENTRY CONFIGURATION (R04001)

MACH (3) = 4.000 ALPHA (2) = 10.010 RN/L = 3.4940 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0755	.0755	.0263												
70.000	.0738	.0483	.0314												
80.000	.0738	.0500	.0362												
90.000			.0450	.0078	-.0315	-.0417	-.0434	-.0468	-.0468	-.0451	-.0468	-.0468	-.0497	-.0497	-.0516
100.000						-.0434	-.0451	-.0451	-.0468	-.0485	-.0485	-.0485	-.0516	-.0516	-.0516
110.000						-.0451	-.0468	-.0451	-.0434	-.0451	-.0468	-.0497	-.0516	-.0516	-.0516
120.000						-.0298								-.0648	
130.000						-.0451								-.0648	
140.000						-.0655								-.0648	
150.000						-.0655								-.0629	
160.000						-.0672								-.0629	
170.000						-.0672								-.0629	
180.000						-.0638	-.0655	-.0655	-.0638	-.0638	-.0638	-.0648	-.0648	-.0648	-.0648

X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0516	-.0535	-.0535	-.0573	-.0573	-.0591	-.0587	-.058[illegible]	-.0587	-.0604	-.0621	-.0621	-.0621	-.0604	-.0632
100.000	-.0535	-.0554	-.0554	-.0573	-.0573	-.0591	-.0587	-.0587	-.0587	-.0604	-.0587	-.0621	-.0604	-.0587	-.0614
110.000	-.0535	-.0535	-.0554	-.0573	-.0535	-.0591	-.0570	-.0587	-.0587	-.0587	-.0553	-.0536	-.0536	-.0536	-.0562
120.000						-.0535								-.0468	
130.000						-.0434								-.0468	
140.000						-.0468								-.0468	
150.000						-.0502								-.0451	
160.000						-.0553								-.0587	
170.000						-.0621								-.0723	
180.000	-.0648	-.0648	-.0648	-.0648	-.0667	-.0621	-.0655	-.0672	-.0689	-.0706	-.0706	-.0723	-.0740	-.0723	-.0788

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0875		
70.000							-.0823	-.0788	-.0771
80.000							-.0632	-.0666	-.0754
90.000	-.0892	-.0866	-.0884	-.0884	-.0649	-.0597	-.0492	-.0562	-.0632
100.000	-.0579	-.0597	-.0597	-.0597	-.0527	-.0579			
110.000	-.0579	-.0527	-.0510	-.0440	-.0266	-.0213			
120.000						.0030			
130.000						.[illegible]736			
140.000						.1267			
150.000						.0936			
160.000						-.0335			
170.000						-.0457			
180.000	-.0736	-.0719	-.0701	-.0649	-.0614	-.0527			

OA64 ORBITER ENTRY CONFIGURATION (RQ4001)

MACH (3) = 4.000 ALPHA (3) = [illegible].010 RN/L = 3.4940 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.0745	.0678	.0289												
70.000	.0881	.0456	.0323												
80.000	.0827	.0456	.0391												
90.000			.0458	.0120	-.0268	-.0386	-.0403	-.0420	-.0403	-.0420	-.0437	-.0437	-.0497	-.0516	-.0535
100.000						-.0420	-.0437	-.0437	-.0437	-.0454	-.0471	-.0471	-.0516	-.0535	-.0535
110.000						-.0386	-.0403	-.0386	-.0420	-.0454	-.0471	-.0497	-.0516	-.0535	-.0573
120.000						-.0302								-.0629	
130.000						-.0454								-.0648	
140.000						-.0656								-.0648	
150.000						-.0656								-.0648	
160.000						-.0656								-.0648	
170.000						-.0673								-.0667	
180.000						-.0656	-.0656	-.0640	-.0656	-.0656	-.0656	-.0686	-.0704	-.0704	-.0704

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0554	-.0573	-.0591	-.0591	-.[illegible]91	-.0591	-.0599	-.0616	-.0616	-.0616	-.0633	-.0616	-.0633	-.0616	-.0652
100.000	-.0554	-.0573	-.0591	-.0591	-.[illegible]73	-.0610	-.0616	-.0616	-.0616	-.0616	-.0633	-.0633	-.0616	-.0616	-.0618
110.000	-.0591	-.0573	-.0610	-.0629	-.0535	-.0629	-.0616	-.0616	-.0616	-.0616	-.0633	-.0581	-.0581	-.0616	-.0566
120.000						-.0629								-.0495	
130.000						-.0460								-.0495	
140.000						-.0460								-.0495	
150.000						-.0512								-.0443	
160.000						-.0581								-.0685	
170.000						-.0702								-.0841	
180.000	-.0704	-.0704	-.0725	-.0723	-.0723	-.0737	-.0754	-.0754	-.0789	-.0789	-.0789	-.0772	-.0789	-.0841	-.0824

X/L	.7290	.7470	.7670	.78[illegible]	.8050	.8290	.8620	.9000	.9400
PHI									
80.000							-.0841		
70.000							-.0910	-.0841	-.0824
80.000							-.0841	-.0841	-.0841
90.000	-.0869	-.0721	-.0772	-.0790	-.0755	-.0721	-.0869	-.0869	-.0738
100.000	-.0800	-.0835	-.0852	-.0869	-.0583	-.0869			
110.000	-.0549	-.0549	-.0549	-.0483	-.0256	-.0170			
120.000						.0294			
130.000						.0191			
140.000						.1085			
150.000						.0948			
160.000						-.0239			
170.000						-.0497			
180.000	-.0807	-.0807	-.0790	-.0772	-.0721	-.0583			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

OA64 ORBITER ENTRY CONFIGURATION (RQ4001)

MACH (3) = 4.000 ALPHA (4) = 14.010 RN/L = 3.4940 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1200	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0712	.0526	.0289												
70.000	.0578	.0441	.0272												
80.000	.0509	.0391	.0340												
90.000			.0408	.0154	-.0251	-.0369	-.0386	-.0386	-.0403	-.0437	-.0437	-.0454	-.0516	-.0535	-.0573
100.000						-.0403	-.0420	-.0437	-.0437	-.0454	-.0454	-.0488	-.0535	-.0535	-.0573
110.000						-.0369	-.0403	-.0403	-.0454	-.0504	-.0504	-.0554	-.0573	-.0591	-.0629
120.000						-.0336								-.0667	
130.000						-.0471								-.0648	
140.000						-.0673								-.0648	
150.000						-.0690								-.0648	
160.000						-.0690								-.0704	
170.000						-.0690									
180.000						-.0690	-.0690	-.0690	-.0690	-.0690	-.0690	-.0723	-.0723	-.0723	-.0723

X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0573	-.0573	-.0573	-.0573	-.0591	-.0591	-.0600	-.0618	-.0618	-.0618	-.0618	-.0635	-.0669	-.0704	-.0722
100.000	-.0591	-.0591	-.0610	-.0591	-.0591	-.0610	-.0618	-.0618	-.0635	-.0618	-.0618	-.0618	-.0618	-.0635	-.0619
110.000	-.0629	-.0648	-.0648	-.0629	-.0573	-.0629	-.0618	-.0652	-.0635	-.0618	-.0618	-.0600	-.0583	-.0635	-.0551
120.000						-.0648								-.0566	
130.000						-.0566								-.0583	
140.000						-.0532								-.0549	
150.000						-.0549								-.0549	
160.000						-.0618								-.0652	
170.000						-.0807								-.0927	
180.000	-.0761	-.0761	-.0761	-.0761	-.0780	-.0807	-.0807	-.0807	-.0824	-.0841	-.0824	-.0876	-.0893	-.0910	-.0824

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0842		
70.000							-.0876	-.0842	-.0876
80.000							-.0910	-.0859	-.0876
90.000	-.0798	-.0807	-.0807	-.0790	-.0790	-.0807	-.0876	-.0893	-.0824
100.000	-.0819	-.0836	-.0836	-.0819	-.0819	-.0790			
110.000	-.0568	-.0551	-.0534	-.0485	-.0380	-.0534			
120.000						.0441			
130.000						.0270			
140.000						.0543			
150.000						.0697			
160.000						-.0209			
170.000						-.0483			
180.000	-.0807	-.0790	-.0790	-.0790	-.0722	-.0602			

OA84 ORBITER ENTRY CONFIGURATION (R04001)

MACH (5) = 4.000 ALPHA (5) = 16.010 RN/L = 5.4940 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0673	.0360	.0294												
70.000	.0483	.0397	.0243												
80.000	.0380	.0311	.0277												
90.000			.0348	.0105	-.0274	-.0394	-.0428	-.0428	-.0446	-.0480	-.0497	-.0514	-.0568	-.0568	-.0568
100.000						-.0428	-.0428	-.0428	-.0463	-.0480	-.0497	-.0532	-.0568	-.0587	-.0568
110.000						-.0428	-.0463	-.0480	-.0497	-.0532	-.0549	-.0606	-.0625	-.0645	-.0664
120.000						-.0411								-.0740	
130.000						-.0532								-.0702	
140.000						-.0755								-.0683	
150.000						-.0755								-.0664	
160.000						-.0755								-.0683	
170.000						-.0755								-.0778	
180.000						-.0755	-.0755	-.0755	-.0772	-.0772	-.0772	-.0797	-.0797	-.0797	-.0836

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0568	-.0568	-.0568	-.0568	- 0568	-.0568	-.0568	-.0585	-.0619	-.0654	-.0722	-.0756	-.0790	-.0842	-.0876
100.000	-.0606	-.0606	-.0606	-.0606	-.0606	-.0606	-.0585	-.0585	-.0585	-.0568	-.0585	-.0602	-.0619	-.0654	-.0737
110.000	-.0645	-.0664	-.0664	-.0645	-.0606	-.0664	-.0636	-.0585	-.0619	-.0619	-.0585	-.0602	-.0602	-.0602	-.0599
120.000						-.0702								-.0585	
130.000						-.0688								-.0602	
140.000						-.0619								-.0585	
150.000						-.0585								-.0551	
160.000						-.0654								-.0705	
170.000						-.0842								-.0910	
180.000	-.0836	-.0836	-.0836	-.0836	-.0855	-.0842	-.0842	-.0824	-.0876	-.0910	-.0910	-.0859	-.0893	-.0910	-.0858

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0893		
70.000							-.0927	-.0962	-.0945
80.000							-.0945	-.0962	-.0910
90.000	-.0893	-.0927	-.0927	-.0893	-.0893	-.0910	-.0962	-.0945	-.0910
100.000	-.0772	-.0824	-.0824	-.0789	-.0824	-.0910			
110.000	-.0618	-.0651	-.0618	-.0564	-.0529	-.0685			
120.000						.0561			
130.000						.0354			
140.000						.0338			
150.000						.0423			
160.000						-.0027			
170.000						-.0443			
180.000	-.0841	-.0841	-.0808	-.0702	-.0668	-.0408			

OA64 ORBITER ENTRY CONFIGURATION (RQ4001)

MACH (3) = 4.000 ALPHA (6) = 18.010 RN/L = 3.4940 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.0687	.0314	.0314												
70.000	.0418	.0382	.0246												
80.000	.0280	.0248	.0212												
90.000			.0280	.0078	-.0298	-.0400	-.0400	-.0417	-.0451	-.0468	-.0485	-.0502	-.0521	-.0521	-.0502
100.000						-.0400	-.0400	-.0417	-.0451	-.0468	-.0485	-.0502	-.0521	-.0540	-.0502
110.000						-.0400	-.0417	-.0434	-.0485	-.0519	-.0553	-.0558	-.0577	-.0577	-.0577
120.000						-.0400								-.0781	
130.000						-.0536								-.0707	
140.000						-.0723								-.0670	
150.000						-.0740								-.0614	
160.000						-.0740								-.0633	
170.000						-.0740								-.0744	
180.000						-.0740	-.0740	-.0740	-.0757	-.0757	-.0774	-.0781	-.0800	-.0800	-.0800

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0502	-.0502	-.0502	-.0502	-.0502	-.0540	-.0589	-.0673	-.0758	-.0825	-.0876	-.0893	-.0910	-.0927	-.0979
100.000	-.0540	-.0521	-.0521	-.0521	-.0521	-.0521	-.0504	-.0538	-.0521	-.0538	-.0572	-.0640	-.0707	-.0775	-.0876
110.000	-.0595	-.0577	-.0577	-.0577	-.0502	-.0577	-.0572	-.0538	-.0504	-.0538	-.0572	-.0555	-.0572	-.0589	-.0652
120.000						-.0651								-.0555	
130.000						-.0673								-.0555	
140.000						-.0656								-.0572	
150.000						-.0589								-.0555	
160.000						-.0640								-.0724	
170.000						-.0792								-.0859	
180.000	-.0800	-.0800	-.0800	-.0800	-.0800	-.0808	-.0842	-.0859	-.0876	-.0876	-.0876	-.0859	-.0825	-.0859	-.0858

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0893		
70.000							-.0910	-.0910	-.0876
80.000							-.0910	-.0910	-.0858
90.000	-.1013	-.0979	-.0927	-.0927	-.0979	-.0979	-.0910	-.0927	-.0893
100.000	-.0893	-.0927	-.0927	-.0927	-.0927	-.0944			
110.000	-.0806	-.0738	-.0755	-.0755	-.0738	-.0858			
120.000						.0225			
130.000						.0483			
140.000						.0243			
150.000						.0260			
160.000						-.0549			
170.000						-.0463			
180.000	-.0841	-.0807	-.0755	-.0738	-.0721	-.0446			

OA84 ORBITER ENTRY CONFIGURATION (R04001)

MACH (3) = 4.000 ALPHA (7) = 20.000 RN/L = 3.4940 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0570	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0881	.0205	.0306												
70.000	.0340	.0337	.0256												
80.000	.0188	.0171	.0171												
90.000			.0171	.0002	-.	-.0420	-.0420	-.0437	-.0437	-.0454	-.0471	-.0488	-.0519	-.0519	-.0481
100.000						-.0403	-.0420	-.0437	-.0454	-.0471	-.0471	-.0488	-.0556	-.0537	-.0481
110.000						-.0386	-.0420	-.0454	-.0488	-.0521	-.0538	-.0575	-.0556	-.0575	-.0593
120.000						-.0437								-.0618	
130.000						-.0538								-.0762	
140.000						-.0724								-.0724	
150.000						-.0741								-.0612	
160.000						-.0741								-.0631	
170.000						-.0741								-.0781	
180.000						-.0741	-.0741	-.0758	-.0758	-.0775	-.0792	-.0837	-.0837	-.0837	-.0837

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0481	-.0462	-.0444	-.0462	-.0650	-.0837	-.0876	-.0910	-.0927	-.0944	-.0944	-.0944	-.0960	-.0960	-.0961
100.000	-.0537	-.0519	-.0519	-.0519	-.0519	-.0500	-.0471	-.0504	-.0640	-.0741	-.0842	-.0893	-.0927	-.0960	-.0961
110.000	-.0593	-.0575	-.0575	-.0575	-.0462	-.0556	-.0538	-.0504	-.0538	-.0504	-.0504	-.0555	-.0640	-.0724	-.0808
120.000						-.0668								-.0572	
130.000						-.0707								-.0572	
140.000						-.0707								-.0640	
150.000						-.0656								-.0690	
160.000						-.0673								-.0808	
170.000						-.0808								-.0859	
180.000	-.0818	-.0818	-.0837	-.0837	-.0837	-.0859	-.0893	-.0893	-.0876	-.0876	-.0876	-.0859	-.0842	-.0842	-.0791

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0842		
70.000							-.0876	-.0893	-.0825
80.000							-.0893	-.0876	-.0825
90.000	-.0961	-.0910	-.0910	-.0876	-.0893	-.0893	-.0910	-.0876	-.0859
100.000	-.0944	-.0961	-.0961	-.0927	-.0893	-.0893			
110.000	-.0876	-.0893	-.0910	-.0893	-.0910	-.0961			
120.000						-.0485			
130.000						.0314			
140.000						.0008			
150.000						.0059			
160.000						-.0519			
170.000						-.0383			
180.000	-.0774	-.0757	-.0740	-.0740	-.0689	-.0366			

OA64 ORBITER ENTRY CONFIGURATION (RQ4001)

MACH (3) = 4.000 ALPHA (8) = 20.950 RN/L = 3.4940 BETA = 6.0900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0893	.0144	.0514												
70.000	.0297	.0365	.0263												
80.000	.0127	.0127	.0161												
90.000			.0110	-.0060	-.0332	-.0434	-.0451	-.0434	-.0451	-.0468	-.0485	-.0485	-.0500	-.0481	-.0462
100.000						-.0434	-.0451	-.0451	-.0468	-.0485	-.0485	-.0502	-.0537	-.0537	-.0481
110.000						-.0417	-.0451	-.0468	-.0502	-.0536	-.0536	-.0556	-.0556	-.0575	-.0593
120.000						-.0451								-.0818	
130.000						-.0553								-.0743	
140.000						-.0740								-.0631	
150.000						-.0774								-.0650	
160.000						-.0757								-.0799	
170.000						-.0774									
180.000						-.0774	-.0774	-.0774	-.0791	-.0825	-.0842	-.0837	-.0837	-.0837	-.0837

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6980	.7100
PHI															
90.000	-.0444	-.0425	-.0444	-.0706	-.0818	-.0912	-.0961	-.0961	-.0944	-.0944	-.0961	-.0961	-.0927	-.0961	-.0961
100.000	-.0519	-.0519	-.0500	-.0500	-.0431	-.0462	-.0502	-.0672	-.0791	-.0876	-.0910	-.0944	-.0961	-.0961	-.0961
110.000	-.0593	-.0575	-.0575	-.0556	-.0444	-.0537	-.0553	-.0536	-.0519	-.0502	-.0570	-.0672	-.0791	-.0842	-.0893
120.000						-.0687								-.0587	
130.000						-.0706								-.0638	
140.000						-.0723								-.0672	
150.000						-.0706								-.0706	
160.000						-.0706								-.0791	
170.000						-.0808								-.0842	
180.000	-.0837	-.0837	-.0837	-.0837	-.0855	-.0893	-.0910	-.0876	-.0876	-.0876	-.0876	-.0876	-.0859	-.0859	-.0808

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0825		
70.000							-.0876	-.0859	-.0842
80.000							-.0876	-.0842	-.0825
90.000	-.0961	-.0876	-.0910	-.0893	-.0893	-.0893	-.0893	-.0876	-.0825
100.000	-.0961	-.0961	-.0910	-.0876	-.0893	-.0893			
110.000	-.0910	-.0927	-.0859	-.0910	-.0961	-.0927			
120.000						-.0808			
130.000						.0314			
140.000						-.0094			
150.000						-.0009			
160.000						-.0485			
170.000						-.0315			
180.000	-.0791	-.0774	-.0740	-.0706	-.0689	-.0281			

OA84 ORBITER ENTRY CONFIGURATION (RQ40D1)

MACH (4) = 4.500 ALPHA (1) = 8.000 RN/L = 3.5000 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0772	.0655	.0304												
70.000	.0802	.0500	.0357												
80.000	.0847	.0538	.0425												
90.000			.0478	.0108	-.0223	-.0314	-.0344	-.0351	-.0359	-.0374	-.0374	-.0381	-.0365	-.0369	-.0378
100.000						-.0321	-.0336	-.0344	-.0359	-.0374	-.0374	-.0381	-.0365	-.0371	-.0378
110.000						-.0374	-.0396	-.0404	-.0404	-.0396	-.0381	-.0358	-.0371	-.0378	-.0391
120.000						-.0470								-.0476	
130.000						-.0291								-.0483	
140.000						-.0449								-.0483	
150.000						-.0464								-.0463	
160.000						-.0472								-.0463	
170.000						-.0472								-.0456	
180.000						-.0442	-.0457	-.0472	-.0472	-.0472	-.0472	-.0450	-.0456	-.0463	-.0463

X/L	.4300	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6690	.7100
PHI															
90.000	-.0384	-.0397	-.0397	-.0404	-.0410	-.0424	-.0418	-.0433	-.0440	-.0440	-.0440	-.0448	-.0448	-.0448	-.0437
100.000	-.0397	-.0397	-.0404	-.0410	-.0417	-.0430	-.0425	-.0433	-.0433	-.0433	-.0440	-.0433	-.0433	-.0448	-.0402
110.000	-.0397	-.0397	-.0397	-.0404	-.0351	-.0417	-.0418	-.0425	-.0425	-.0433	-.0433	-.0425	-.0425	-.0425	-.0375
120.000						-.0378								-.0327	
130.000						-.0380								-.0319	
140.000						-.0403								-.0350	
150.000						-.0425								-.0395	
160.000						-.0440								-.0448	
170.000						-.0463								-.0456	
180.000	-.0456	-.0463	-.0456	-.0463	-.0463	-.0463	-.0463	-.0463	-.0456	-.0425	-.0456	-.0456	-.0448	-.0448	-.0420

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0563		
70.000							-.0509	-.0473	-.0429
80.000							-.0393	-.0411	-.0429
90.000	-.0411	-.0420	-.0420	-.0420	-.0402	-.0366	-.0330	-.0357	-.0366
100.000	-.0393	-.0393	-.0393	-.0384	-.0348	-.0357			
110.000	-.0375	-.0375	-.0366	-.0321	-.0232	-.0259			
120.000						.0206			
130.000						.0617			
140.000						.0760			
150.000						.0072			
160.000						-.0348			
170.000						-.0232			
180.000	-.0411	-.0411	-.0402	-.0393	-.0375	-.0330			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4001)

OA64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (2) = 10.000 RN/L = 3.500^ BETA = 6.0500

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0711	.0727	.0262												
70.000	.0689	.0445	.0315												
80.000	.0689	.0452	.0376												
90.000			.0430	.0102	-.0241	-.0332	-.0363	-.0378	-.0393	-.0401	-.0408	-.0408	-.0456	-.0462	-.0489
100.000						-.0347	-.0370	-.0378	-.0401	-.0408	-.0416	-.0431	-.0476	-.0489	-.0503
110.000						-.0386	-.0408	-.0408	-.0416	-.0424	-.0431	-.0462	-.0476	-.0489	-.0503
120.000						-.0256								-.0726	
130.000						-.0363								-.0584	
140.000						-.0523								-.0584	
150.000						-.0538								-.0577	
160.000						-.0546								-.0577	
170.000						-.0546								-.0584	
180.000						-.0530	-.0538	-.0546	-.0553	-.0553	-.0553	-.0584	-.0591	-.0591	-.0591

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0496	-.0503	-.0516	-.0523	-.0523	-.0550	-.0535	-.0543	-.0543	-.0543	-.0550	-.0550	-.0550	-.0550	-.0521
100.000	-.0510	-.0510	-.0523	-.0523	-.0537	-.0557	-.0543	-.0543	-.0550	-.0550	-.0550	-.0543	-.0550	-.0543	-.0503
110.000	-.0518	-.0523	-.0530	-.0543	-.0581	-.0557	-.0543	-.0543	-.0543	-.0543	-.0535	-.0527	-.0550	-.0535	-.0475
120.000						-.0530								-.0473	
130.000						-.0411								-.0434	
140.000						-.0465								-.0434	
150.000						-.0496								-.0480	
160.000						-.0543								-.0597	
170.000						-.0589								-.0643	
180.000	-.0591	-.0591	-.0597	-.0604	-.0591	-.0597	-.0605	-.0605	-.0612	-.0620	-.0620	-.0628	-.0636	-.0636	-.0604

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.0705		
80.000							-.0705	-.0696	-.0669
70.000							-.0613	-.0604	-.0641
80.000							-.0448	-.0457	-.0521
90.000	-.0540	-.0567	-.0586	-.0586	-.0577	-.0531			
100.000	-.0483	-.0512	-.0521	-.0512	-.0475	-.0485			
110.000	-.0466	-.0466	-.0448	-.0402	-.0291	-.0227			
120.000						.0031			
130.000						.0178			
140.000						.0730			
150.000						.0389			
160.000						-.0466			
170.000						-.0402			
180.000	-.0586	-.0586	-.0567	-.0549	-.0512	-.0457			

OA64 ORBITER ENTRY CONFIGURATION (R04001)

MACH (4) = 4.500 ALPHA (3) = 12.000 RN/L = 3.5000 BETA = 6.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0718	.0633	.0297												
70.000	.0841	.0481	.0319												
80.000	.0804	.0439	.0387												
90.000			.0446	.0177	-.0139	-.0264	-.0294	-.0309	-.0316	-.0331	-.0339	-.0354	-.0407	-.0420	-.0448
100.000						-.0294	-.0316	-.0331	-.0339	-.0361	-.0369	-.0384	-.0433	-.0440	-.0460
110.000						-.0309	-.0331	-.0354	-.0361	-.0376	-.0376	-.0433	-.0453	-.0466	-.0493
120.000						-.0257								-.0519	
130.000						-.0339								-.0533	
140.000						-.0496								-.0533	
150.000						-.0511								-.0539	
160.000						-.0518								-.0539	
170.000						-.0526								-.0553	
180.000						-.0511	-.0518	-.0526	-.0526	-.0526	-.0526	-.0566	-.0566	-.0566	-.0566

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0466	-.0473	-.0480	-.0486	-.0493	-.0500	-.0471	-.0463	-.0463	-.0463	-.0463	-.0471	-.0471	-.0471	-.0543
100.000	-.0473	-.0486	-.0500	-.0506	-.0519	-.0519	-.0486	-.0463	-.0479	-.0471	-.0479	-.0479	-.0463	-.0479	-.0470
110.000	-.0500	-.0506	-.0519	-.0526	-.0373	-.0533	-.0501	-.0471	-.0486	-.0479	-.0471	-.0463	-.0456	-.0479	-.0443
120.000						-.0526								-.0418	
130.000						-.0410								-.0418	
140.000						-.0403								-.0418	
150.000						-.0433								-.0418	
160.000						-.0501								-.0600	
170.000						-.0569								-.0622	
180.000	-.0573	-.0586	-.0593	-.0593	-.0533	-.0577	-.0584	-.0592	-.0600	-.0600	-.0615	-.0600	-.0622	-.0622	-.0606

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0642		
70.000							-.0678	-.0642	-.0651
80.000							-.0687	-.0669	-.0660
90.000	-.0524	-.0552	-.0570	-.0579	-.0561	-.0579	-.0606	-.0660	-.0633
100.000	-.0479	-.0479	-.0470	-.0452	-.0443	-.0506			
110.000	-.0443	-.0443	-.0416	-.0360	-.0298	-.0334			
120.000						.0353			
130.000						.0136			
140.000						.0742			
150.000						.0706			
160.000						-.0452			
170.000						-.0452			
180.000	-.0588	-.0588	-.0588	-.0579	-.0534	-.0461			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1973) (RQ4001)

OA84 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (4) = 14.010 RN/L = 3.5000 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4510
PHI															
80.000	.0898	.0328	.0317												
70.000	.0563	.0436	.0287												
80.000	.0489	.0384	.0339												
90.000			.0407	.0183	-.0153	-.0250	-.0280	-.0295	-.0302	-.0325	-.0340	-.0355	-.0403	-.0410	-.0436
100.000						-.0280	-.0302	-.0317	-.0332	-.0347	-.0355	-.0377	-.0410	-.0423	-.0442
110.000						-.0280	-.0325	-.0340	-.0362	-.0392	-.0414	-.0436	-.0456	-.0469	-.0488
120.000						-.0280								-.0521	
130.000						-.0362								-.0508	
140.000						-.0519								-.0502	
150.000						-.0534								-.0508	
160.000						-.0541								-.0521	
170.000						-.0541								-.0554	
180.000						-.0541	-.0541	-.0541	-.0549	-.0549	-.0549	-.0561	-.0567	-.0567	-.0581

X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0442	-.0442	-.0436	-.0436	-.0436	-.0436	-.0419	-.0411	-.0419	-.0411	-.0434	-.0464	-.0517	-.0562	-.0633
100.000	-.0469	-.0482	-.0475	-.0469	-.0469	-.0469	-.0456	-.0456	-.0456	-.0441	-.0441	-.0471	-.0449	-.0449	-.0507
110.000	-.0502	-.0508	-.0508	-.0521	-.0537	-.0508	-.0487	-.0456	-.0487	-.0471	-.0464	-.0464	-.0449	-.0441	-.0471
120.000						-.0521								-.0434	
130.000						-.0464								-.0441	
140.000						-.0419								-.0411	
150.000						-.0434								-.0411	
160.000						-.0509								-.0592	
170.000						-.0607								-.0638	
180.000	-.0800	-.0800	-.0800	-.0800	-.0574	-.0607	-.0607	-.0615	-.0622	-.0622	-.0645	-.0638	-.0630	-.0622	-.0642

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8610	.9000	.9400
PHI									
80.000							-.0689		
70.000							-.0705	-.0696	-.0696
80.000							-.0714	-.0696	-.0696
90.000	-.0833	-.0880	-.0878	-.0842	-.0860	-.0896	-.0733	-.0714	-.0660
100.000	-.0518	-.0561	-.0525	-.0498	-.0543	-.0606			
110.000	-.0480	-.0462	-.0399	-.0363	-.0335	-.0429			
120.000						.0350			
130.000						.0107			
140.000						.0369			
150.000						.0359			
160.000						-.0344			
170.000						-.0462			
180.000	-.0842	-.0951	-.0842	-.0597	-.0579	-.0480			

OA64 ORBITER ENTRY CONFIGURATION (RQ4001)

MACH (4) = 4.500 ALPHA (5) = 16.000 RN/L = 3.5000 BETA = 6.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.0866	.0412	.0314												
70.000	.0487	.0397	.0262												
80.000	.0382	.0314	.0269												
90.000			.0337	.0142	-.0181	-.0278	-.0308	-.0316	-.0331	-.0353	-.0376	-.0391	-.0446	-.0446	-.0448
100.000						-.0286	-.0308	-.0325	-.0346	-.0361	-.0383	-.0406	-.0453	-.0466	-.0488
110.000						-.0308	-.0331	-.0353	-.0376	-.0406	-.0428	-.0473	-.0500	-.0506	-.0513
120.000						-.0316								-.0599	
130.000						-.0398								-.0566	
140.000						-.0548								-.0546	
150.000						-.0563								-.0539	
160.000						-.0571								-.0566	
170.000						-.0578								-.0619	
180.000						-.0578	-.0578	-.0578	-.0578	-.0586	-.0586	-.0619	-.0632	-.0639	-.0659

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0440	-.0433	-.0433	-.0420	-.0413	-.0413	-.0429	-.0437	-.0498	-.0563	-.0659	-.0705	-.0721	-.0744	-.0780
100.000	-.0480	-.0473	-.0473	-.0466	-.0466	-.0466	-.0452	-.0437	-.0437	-.0437	-.0452	-.0475	-.0475	-.0529	-.0560
110.000	-.0526	-.0539	-.0519	-.0513	-.0533	-.0513	-.0514	-.0514	-.0506	-.0506	-.0491	-.0483	-.0483	-.0529	-.0487
120.000						-.0566								-.0529	
130.000						-.0575								-.0529	
140.000						-.0537								-.0529	
150.000						-.0514								-.0521	
160.000						-.0583								-.0629	
170.000						-.0675								-.0705	
180.000	-.0659	-.0652	-.0652	-.0659	-.0659	-.0675	-.0682	-.0705	-.21	-.0690	-.0721	-.0690	-.0675	-.0690	-.0680

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0705		
70.000							-.0715	-.0715	-.07
80.000							-.0724	-.0705	-.0705
90.000	-.0724	-.0733	-.0733	-.0724	-.0715	-.0733	-.0715	-.0715	-.0696
100.000	-.0805	-.0851	-.0669	-.0642	-.0660	-.0642			
110.000	-.0503	-.0498	-.0478	-.0469	-.0487	-.0642			
120.000						.0669			
130.000						.0268			
140.000						.0241			
150.000						.0168			
160.000						-.0432			
170.000						-.0442			
180.000	-.0660	-.0651	-.0633	-.0578	-.0569	-.0560			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(RQ4001)

OA64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (6) = 18.000 RN/L = 3.5000 BETA = 6.0300

SECTION (1)FUSELAGE

DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0844	.0294	.0316												
70.000	.0413	.0378	.0257												
80.000	.0288	.0249	.0212												
90.000			.0257	.0085	-.0206	-.0303	-.0318	-.0333	-.0340	-.0362	-.0377	-.0400	-.0397	-.0397	-.0384
100.000						-.0295	-.0318	-.0333	-.0347	-.0370	-.0385	-.0400	-.0430	-.0437	-.0430
110.000						-.0295	-.0325	-.0347	-.0377	-.0415	-.0430	-.0443	-.0463	-.0456	-.0482
120.000						-.0325								-.0601	
130.000						-.0415								-.0555	
140.000						-.0549								-.0535	
150.000						-.0571								-.0496	
160.000						-.0571								-.0528	
170.000						-.0579								-.0601	
180.000						-.0579	-.0579	-.0579	-.0586	-.0601	-.0609	-.0620	-.0633	-.0633	-.0633

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0364	-.0345	-.0332	-.0286	-.0318	-.0528	-.0622	-.0683	-.0705	-.0728	-.0728	-.0721	-.0713	-.0721	-.0705
100.000	-.0423	-.0417	-.0404	-.0397	-.0391	-.0371	-.0349	-.0319	-.0334	-.0433	-.0561	-.0637	-.0683	-.0705	-.0696
110.000	-.0469	-.0463	-.0450	-.0456	-.0279	-.0450	-.0433	-.0418	-.0410	-.0402	-.0380	-.0387	-.0387	-.0425	-.0490
120.000						-.0535								-.0440	
130.000						-.0539								-.0463	
140.000						-.0546								-.0471	
150.000						-.0508								-.0501	
160.000						-.0546								-.0622	
170.000						-.0637								-.0668	
180.000	-.0633	-.0633	-.0633	-.0633	-.0614	-.0668	-.0675	-.0675	-.0698	-.0675	-.0668	-.0660	-.0637	-.0660	-.0607

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0643		
70.000							-.0670	-.0652	-.0634
80.000							-.0679	-.0661	-.0643
90.000	-.0696	-.0696	-.0670	-.0670	-.0670	-.0652	-.0661	-.0670	-.0670
100.000	-.0696	-.0705	-.0688	-.0670	-.0696	-.0634			
110.000	-.0580	-.0625	-.0643	-.0625	-.0661	-.0705			
120.000						.0380			
130.000						.0263			
140.000						.0111			
150.000						.0048			
160.000						-.0427			
170.000						-.0392			
180.000	-.0807	-.0598	-.0562	-.0535	-.0535	-.0517			

OA84 ORBITER ENTRY CONFIGURATION (R04001)

MACH (4) = 4.500 ALPHA (7) = 20.000 RN/L = 3.5000 BETA = 6.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3580	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0802	.0187	.0292												
70.000	.0315	.0338	.0232												
80.000	.0164	.0149	.0158												
90.000			.0128	-.0018	-.0267	-.0358	-.0373	-.0373	-.0380	-.0396	-.0411	-.0411	-.0389	-.0378	-.0343
100.000						-.0358	-.0373	-.0386	-.0396	-.0411	-.0418	-.0441	-.0435	-.0435	-.0415
110.000						-.0350	-.0373	-.0403	-.0433	-.0456	-.0456	-.0448	-.0455	-.0475	-.0475
120.000						-.0380								-.0633	
130.000						-.0456								-.0633	
140.000						-.0600								-.0574	
150.000						-.0622								-.0508	
160.000						-.0615								-.0541	
170.000						-.0630								-.0639	
180.000						-.0630	-.0630	-.0637	-.0653	-.0668	-.0675	-.0659	-.0659	-.0666	-.0666

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0283	-.0184	-.0455	-.0659	-.0699	-.0738	-.0790	-.0775	-.0775	-.0775	-.0775	-.0767	-.0775	-.0775	-.0769
100.000	-.0409	-.0389	-.0369	-.0343	-.0290	-.0244	-.0467	-.0659	-.0736	-.0767	-.0782	-.0775	-.0767	-.0767	-.0760
110.000	-.0468	-.0461	-.0448	-.0442	-.0178	-.0415	-.0428	-.0405	-.0344	-.0328	-.0451	-.0613	-.0713	-.0752	-.0751
120.000						-.0554								-.0482	
130.000						-.0598								-.0536	
140.000						-.0613								-.0559	
150.000						-.0598								-.0598	
160.000						-.0613								-.0675	
170.000						-.0682								-.0713	
180.000	-.0672	-.0672	-.0672	-.0672	-.0639	-.0744	-.0752	-.0752	-.0744	-.0736	-.0721	-.0721	-.0713	-.0705	-.0369

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0715		
70.000							-.0733	-.0715	-.0696
80.000							-.0742	-.0715	-.0696
90.000	-.0742	-.0742	-.0742	-.0724	-.0724	-.0724	-.0733	-.0715	-.0715
100.000	-.0760	-.0742	-.0742	-.0733	-.0724	-.0669			
110.000	-.0751	-.0760	-.0751	-.0751	-.0751	-.0724			
120.000						-.0696			
130.000						.0364			
140.000						-.0139			
150.000						-.0166			
160.000						-.0468			
170.000						-.0393			
180.000	-.0669	-.0641	-.0632	-.0614	-.0596	-.0504			

OA64 ORBITER ENTRY CONFIGURATION (R04001)

MACH (4) = 4.500 ALPHA (8) = 20.960 RN/L = 3.5000 BETA = 6.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0818	.0162	.0311												
70.000	.0311	.0358	.0286												
80.000	.0147	.0147	.0177												
90.000			.0094	-.0033	-.0249	-.0339	-.0347	-.0347	-.0339	-.0362	-.0384	-.0377	-.0340	-.0327	-.0248
100.000						-.0354	-.0362	-.0362	-.0369	-.0384	-.0384	-.0406	-.0392	-.0392	-.0379
110.000						-.0339	-.0362	-.0392	-.0414	-.0429	-.0429	-.0411	-.0431	-.0451	-.0431
120.000						-.0362								-.0607	
130.000						-.0436								-.0614	
140.000						-.0586								-.0562	
150.000						-.0601								-.0483	
160.000						-.0601								-.0516	
170.000						-.0601								-.0621	
180.000						-.0608	-.0608	-.0623	-.0638	-.0646	-.0661	-.0640	-.0640	-.0640	-.0647

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0091	-.0418	-.0640	-.0679	-.0692	-.0699	-.0713	-.0705	-.0698	-.0690	-.0690	-.0675	-.0683	-.0690	-.0688
100.000	-.0359	-.0340	-.0300	-.0222	-.0163	-.0516	-.0645	-.0698	-.0713	-.0705	-.0705	-.0690	-.0690	-.0690	-.0652
110.000	-.0425	-.0418	-.0405	-.0385	-.0059	-.0359	-.0342	-.0281	-.0251	-.0425	-.0599	-.0675	-.0698	-.0698	-.0643
120.000						-.0523								-.0448	
130.000						-.0554								-.0508	
140.000						-.0569								-.0524	
150.000						-.0569								-.0554	
160.000						-.0584								-.0615	
170.000						-.0645								-.0660	
180.000	-.0653	-.0653	-.0647	-.0653	-.0627	-.0698	-.0683	-.0690	-.0690	-.0645	-.0675	-.0668	-.0660	-.0645	-.0598

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0598		
70.000							-.0616	-.0607	-.0607
80.000							-.0616	-.0616	-.0607
90.000	-.0625	-.0625	-.0625	-.0625	-.0616	-.0616	-.0616	-.0616	-.0598
100.000	-.0625	-.0616	-.0625	-.0616	-.0616	-.0571			
110.000	-.0625	-.0625	-.0625	-.0616	-.0625	-.0607			
120.000						-.0688			
130.000						-.0472			
140.000						-.0149			
150.000						-.0131			
160.000						-.0392			
170.000						-.0320			
180.000	-.0580	-.0580	-.0553	-.0544	-.0526	-.0365			

OA64 ORBITER ENTRY CONFIGURATION (R64002) (03 JAN 74)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 IN.
LREF = .0000 IN. YMRP = .0000 IN.
BREF = .0000 IN. ZMRP = .0000 IN.
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = 4.000 ELEVON = -15.000

MACH (1) = 2.500 ALPHA (1) = 7.990 RN/L = 2.5001 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1113	.1069	.0516												
70.000	.1128	.0822	.0568												
80.000	.1230	.0909	.0690												
90.000			.0822	.0234	-.0381	-.0596	-.0596	-.0550	-.0534	-.0534	-.0534	-.0534	-.0539	-.0556	-.0624
100.000						-.0565	-.0550	-.0550	-.0580	-.0596	-.0626	-.0642	-.0658	-.0675	-.0708
110.000						-.0673	-.0703	-.0734	-.0734	-.0811	-.0842	-.0844	-.0861	-.0878	-.0844
120.000						-.0504								-.1065	
130.000						-.0918								-.0997	
140.000						-.1379								-.0963	
150.000						-.1318								-.0963	
160.000						-.1256								-.0895	
170.000						-.1256								-.0861	
180.000						-.1256	-.1210	-.1149	-.1087	-.1041	-.0995	-.0963	-.0912	-.0861	-.0844

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0824	-.0858	-.0858	-.0708	-.0725	-.0725	-.0749	-.0749	-.0780	-.0749	-.0734	-.0688	-.0611	-.0596	-.0587
100.000	-.0708	-.0725	-.0742	-.0708	-.0725	-.0742	-.0765	-.0734	-.0749	-.0703	-.0688	-.0688	-.0611	-.0519	-.0475
110.000	-.0878	-.0844	-.0810	-.0793	-.0742	-.0742	-.0688	-.0688	-.0642	-.0626	-.0596	-.0560	-.0534	-.0488	-.0411
120.000						-.0573								-.0442	
130.000						-.0473								-.0365	
140.000						-.0457								-.0304	
150.000						-.0457								-.0288	
160.000						-.0504								-.0288	
170.000						-.0580								-.0361	
180.000	-.0810	-.0810	-.0742	-.0725	-.0708	-.0642	-.0611	-.0565	-.0504	-.0473	-.0442	-.0442	-.0427	-.0442	-.0443

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1100		
70.000							-.0892	-.0972	-.0699
80.000							-.0619	-.0796	-.0956
90.000	-.0803	-.0780	-.0860	-.0878	-.0780	-.0363	-.0459	-.0819	-.0828
100.000	-.0443	-.0571	-.0619	-.0571	-.0123	-.0715			
110.000	-.0395	-.0363	-.0379	.0118	.0484	.0198			
120.000						.1057			

OA64 ORBITER ENTRY CONFIGURATION (R04002)

MACH (1) = 2.500 ALPHA (1) = 7.990

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
130.000						.1846			
140.000						.2018			
150.000						.2591			
160.000						.2047			
170.000						.2032			
180.000	-.0331	-.0383	-.0379	-.0042	.1129	.2219			

MACH (1) = 2.500 ALPHA (2) = 10.010 RN/L = 2.5001 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1099	.0958	.0819												
70.000	.1000	.0796	.0592												
80.000	.1015	.0825	.0694												
90.000			[illegible]	.0129	-.0451	-.0661	-.0661	-.0630	-.0599	-.0584	-.0568	-.0568	-.0583	-.0600	-.0634
100.000						-.0353	-.0537	-.0522	-.0537	-.0568	-.0599	-.0615	-.0634	-.0669	-.0686
110.000						-.0615	-.0646	-.0646	-.0577	-.0769	-.0800	-.0841	-.0858	-.0892	-.0892
120.000						-.0906								-.1202	
130.000						-.0986								-.1047	
140.000						-.1466								-.0978	
150.000						-.1419								-.0961	
160.000						-.1357								-.0961	
170.000						-.1342								-.0961	
180.000						-.1357	-.1311	-.1265	-.1187	-.1141	-.1110	-.1064	-.1013	-.0961	-.0892

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0889	-.0720	-.0720	-.0755	-.0755	-.0789	-.0814	-.0830	-.0877	-.0861	-.0877	-.0830	-.0798	-.0783	-.0762
100.000	-.0738	-.0772	-.0806	-.0806	-.0841	-.0875	-.0861	-.0877	-.0877	-.0861	-.0861	-.0830	-.0783	-.0720	-.0682
110.000	-.0910	-.0910	-.0910	-.0910	-.0892	-.0927	-.0908	-.0877	-.0830	-.0783	-.0751	-.0704	-.0673	-.0642	-.0601
120.000						-.0892								-.0579	
130.000						-.0579								-.0516	
140.000						-.0501								-.0407	
150.000						-.0454								-.0344	
160.000						-.0485								-.0329	
170.000						-.0563								-.0423	
180.000	-.0873	-.0824	-.0772	-.0738	-.0738	-.0689	-.0657	-.0610	-.0563	-.0548	-.0501	-.0485	-.0485	-.0485	-.0473

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									

OA64 ORBITER ENTRY CONFIGURATION (R04002)

MACH (1) = 2.500 ALPHA (2) = 10.010

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1500		
70.000							-.1227	-.1307	-.1211
80.000							-.0922	-.1051	-.1195
90.000	-.0794	-.0922	-.1034	-.1067	-.1034	-.0817	-.0682	-.0842	-.0986
100.000	-.0817	-.0730	-.0794	-.0810	-.0393	-.0817			
110.000	-.0537	-.0537	-.0537	-.0136	.0281	.0008			
120.000						.1136			
130.000						.1338			
140.000						.1785			
150.000						.2174			
160.000						.1785			
170.000						.1799			
180.000	-.0377	-.0441	-.0425	-.0248	.0747	.1439			

MACH (1) = 2.500 ALPHA (3) = 12.000 RN/L = 2.5001 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1026	.0837	.0516												
70.000	.0881	.0749	.0560												
80.000	.0837	.0764	.0677												
90.000			.0779	.0157	-.0477	-.0647	-.0632	-.0601	-.0570	-.0554	-.0554	-.0554	-.0601	-.0619	-.0670
100.000						-.0585	-.0554	-.0539	-.0554	-.0585	-.0601	-.0632	-.0653	-.0670	-.0722
110.000						-.0524	-.0554	-.0585	-.0632	-.0740	-.0771	-.0808	-.0842	-.0842	-.0859
120.000						-.0462								-.1358	
130.000						-.1003								-.1151	
140.000						-.1513								-.1014	
150.000						-.1466								-.0980	
160.000						-.1405								-.0980	
170.000						-.1405								-.0980	
180.000						-.1405	-.1374	-.1327	-.1265	-.1219	-.1173	-.1151	-.1083	-.1065	-.0982

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0705	-.0722	-.0739	-.0756	-.0790	-.0808	-.0847	-.0847	-.0909	-.0925	-.0940	-.0940	-.0925	-.0925	-.0917
100.000	-.0773	-.0808	-.0842	-.0842	-.0859	-.0876	-.0878	-.0909	-.0940	-.0925	-.0956	-.0956	-.0925	-.0925	-.0869
110.000	-.0894	-.0945	-.0997	-.1031	-.0911	-.1014	-.1003	-.1003	-.0987	-.0972	-.0925	-.0862	-.0815	-.0768	-.0775
120.000						-.1083								-.0659	
130.000						-.0721								-.0753	
140.000						-.0549								-.0518	
150.000						-.0487								-.0393	

OA84 ORBITER ENTRY CONFIGURATION (RQ4002)

MACH (1) = 2.900 ALPHA (3) = 12.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
180.000						-.0502								-.0409	
170.000						-.0581								-.0487	
160.000	-.0911	-.0894	-.0842	-.0808	-.0756	-.0690	-.0643	-.0596	-.0549	-.0502	-.0471	-.0471	-.0502	-.0471	-.0523

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1719		
70.000							-.1515	-.1578	-.1452
80.000							-.1168	-.1310	-.1436
90.000	-.0984	-.1074	-.1153	-.1231	-.1231	-.0822	-.0901	-.1058	-.1184
100.000	-.0791	-.0885	-.0932	-.0948	-.0555	-.0791			
110.000	-.0685	-.0865	-.0681	-.0240	.0091	-.0177			
120.000						.0990			
130.000						.1249			
140.000						.1163			
150.000						.2071			
160.000						.1394			
170.000						.2143			
180.000	-.0413	-.0492	-.0539	-.0523	.0106	.1942			

MACH (1) = 2.900 ALPHA (4) = 14.000 RN/L = 2.5001 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0997	.0705	.0501												
70.000	.0778	.0705	.0501												
80.000	.0881	.0847	.0805												
90.000			.0705	.0187	-.0493	-.0678	-.0647	-.0601	-.0586	-.0586	-.0601	-.0617	-.0642	-.0660	-.0729
100.000						-.0663	-.0647	-.0617	-.0586	-.0586	-.0601	-.0632	-.0677	-.0660	-.0764
110.000						-.0539	-.0539	-.0555	-.0601	-.0694	-.0725	-.0764	-.0815	-.0850	-.0937
120.000						-.0462								-.1490	
130.000						-.1049								-.1300	
140.000						-.1559								-.1058	
150.000						-.1544								-.0954	
160.000						-.1482								-.0954	
170.000						-.1467								-.0988	
180.000						-.1482	-.1436	-.1389	-.1327	-.1281	-.1235	-.1196	-.1109	-.1075	-.1006

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

OA64 ORBITER ENTRY CONFIGURATION (RQ4002)

MACH (1) = 2.500 ALPHA (4) = 14.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0729	-.0729	-.0748	-.0781	-.0798	-.0833	-.0870	-.0885	0933	-.0933	-.0995	-.1011	-.1027	-.1043	-.1090
100.000	-.0798	-.0764	-.0798	-.0781	-.0798	-.0867	-.0885	-.0901	-.0933	-.0948	-.0964	-.0980	-.1011	-.0995	-.0980
110.000	-.1006	-.0971	-.0971	-.0971	-.0833	-.0988	-.0995	-.1043	-.1045	-.1043	-.1011	-.0980	-.0933	-.0901	-.0870
120.000						-.1179								-.0775	
130.000						-.1184								-.0885	
140.000						-.0775								-.0775	
150.000						-.0618								-.0508	
160.000						-.0539								-.0508	
170.000						-.0571								-.0586	
180.000	-.0971	-.0937	-.0867	-.0798	-.0729	-.0665	-.0634	-.0602	-.0586	-.0602	-.0618	-.0681	-.0681	-.0697	-.0995

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1845		
70.000							-.1766	-.1829	-.1641
80.000							-.1499	-.1609	-.1719
90.000	-.1108	-.1283	-.1326	-.1405	-.1405	-.1074	-.1153	-.1326	-.1452
100.000	-.0948	-.1058	-.1137	-.1121	-.0775	-.1011			
110.000	-.0822	-.0838	-.0838	-.0445	-.0067	-.0566			
120.000						.0888			
130.000						.0658			
140.000						-.0177			
150.000						.2186			
160.000						.1321			
170.000						.2128			
180.000	-.0881	-.0791	-.0838	-.0870	-.0571	.2416			

MACH (1) = 2.500 ALPHA (5) = 16.010 RN/L = 2.5001 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.0965	.0586	.0513												
70.000	.0874	.0659	.0470												
80.000	.0499	.0557	.0513												
90.000			.0615	.0185	-.0495	-.0680	-.0649	-.0618	-.0633	-.0649	-.0664	-.0680	-.0713	-.0730	-.0765
100.000						-.0649	-.0633	-.0618	-.0618	-.0649	-.0680	-.0711	-.0730	-.0730	-.0765
110.000						-.0556	-.0603	-.0664	-.0695	-.0757	-.0803	-.0869	-.0920	-.0903	-.0905
120.000						-.0510								-.1594	
130.000						-.1050								-.1376	
140.000						-.1606								-.1111	
150.000						-.1606								-.0972	

OA64 ORBITER ENTRY CONFIGURATION (R04002)

MACH (1) = 2.500 ALPHA (5) = 16.010

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
180.000						-.1529								-.0972	
170.000						-.1529								-.0972	
160.000						-.1529	-.1498	-.1436	-.1390	-.1328	-.1282	-.1214	-.1128	-.1093	-.1059

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5510	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0785	-.0785	-.0799	-.0799	-.0817	-.0851	-.0879	-.0926	-.0957	-.1004	-.1051	-.1098	-.1176	-.1206	-.1331
100.000	-.0785	-.0785	-.0782	-.0799	-.0817	-.0886	-.0879	-.0911	-.0957	-.0942	-.0957	-.1004	-.1004	-.1036	-.1092
110.000	-.0903	-.0920	-.0920	-.0920	-.0834	-.0990	-.1004	-.1020	-.1051	-.1036	-.1036	-.1004	-.1004	-.0973	-.0949
120.000						-.1232								-.0801	
130.000						-.1348								-.0895	
140.000						-.1036								-.1036	
150.000						-.0692								-.0723	
160.000						-.0567								-.0629	
170.000						-.0598								-.0707	
180.000	-.0907	-.0920	-.0886	-.0799	-.0765	-.0723	-.0770	-.0739	-.0739	-.0739	-.0801	-.0817	-.0911	-.0926	-.1013

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1952		
70.000							-.1983	-.1999	-.1777
80.000							-.1792	-.1888	-.1888
90.000	-.1379	-.1538	-.1617	-.1681	-.1681	-.1458	-.1506	-.1649	-.1713
100.000	-.1108	-.1236	-.1283	-.1331	-.1078	-.1347			
110.000	-.0917	-.0981	-.0981	-.0663	-.0185	-.0551			
120.000						.0855			
130.000						.0367			
140.000						-.0408			
150.000						.2162			
160.000						.1186			
170.000						.1846			
180.000	-.0985	-.1060	-.1108	-.1108	-.0879	.2220			

OA64 ORBITER ENTRY CONFIGURATION (R04002)

MACH (1) = 2.500 ALPHA (6) = 17.990 RN/L = 2.5001 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.0922	.0458	.0514												
70.000	.0543	.0802	.0427												
80.000	.0325	.0427	.0369												
90.000			.0412	.0078	-.0540	-.0710	-.0895	-.0879	-.0879	-.0995	-.0726	-.0756	-.0789	-.0772	-.0789
100.000						-.0664	-.0664	-.0664	-.0695	-.0710	-.0741	-.0741	-.0754	-.0772	-.0772
110.000						-.0602	-.0648	-.0695	-.0756	-.0849	-.0865	-.0892	-.0893	-.0893	-.0893
120.000						-.0633								-.1798	
130.000						-.1065								-.1450	
140.000						-.1652								-.1278	
150.000						-.1668								-.1067	
160.000						-.1591								-.0963	
170.000						-.1575								-.0963	
180.000						-.1575	-.1544	-.1482	-.1436	-.1374	-.1297	-.1241	-.1120	-.1137	-.1120

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0808	-.0824	-.0824	-.0841	-.0876	-.0893	-.0957	-.0988	-.1082	-.1160	-.1270	-.1363	-.1442	-.1504	-.1609
100.000	-.0808	-.0824	-.0824	-.0841	-.0859	-.0893	-.0879	-.0910	-.0957	-.0988	-.1020	-.1066	-.1113	-.[illegible]	-.1216
110.000	-.0893	-.0911	-.0928	-.0963	-.0859	-.1015	-.1004	-.1020	-.1035	-.1035	-.1004	-.1004	-.0957	-.[illegible]	-.0933
120.000						-.1363								-.0879	
130.000						-.1457								-.0988	
140.000						-.1317								-.1176	
150.000						-.0816								-.1035	
160.000						-.0613								-.0879	
170.000						-.0644								-.0879	
180.000	-.1085	-.1087	-.1015	-.0980	-.1015	-.1004	-.1035	-.1035	-.1020	-.1035	-.1035	-.1035	-.1098	-.1145	-.1232

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.2003		
70.000							-.2066	-.1908	-.1845
80.000							-.2066	-.1987	-.1908
90.000	-.1704	-.1814	-.1861	-.1830	-.1877	-.1908	-.1798	-.1845	-.1877
100.000	-.1295	-.1436	-.1499	-.1499	-.1547	-.1782			
110.000	-.0998	-.1059	-.1122	-.1028	-.0713	-.0886			
120.000						.0713			
130.000						.0555			
140.000						-.0178			
150.000						.1747			
160.000						.0842			
170.000						.1546			
180.000	-.1169	-.1232	-.1295	-.1279	-.0745	.2178			

OA64 ORBITER ENTRY CONFIGURATION (R04002)

MACH (1) = 2.900 ALPHA (7) = 20.000 RN/L = 2.5001 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0881	.0542	.0316												
70.000	.0429	.0548	.0414												
80.000	.0155	.0264	.0311												
90.000			.0202	-.0049	-.0596	-.0784	-.0768	-.0753	-.0753	-.0768	-.0784	-.0784	-.0798	-.0798	-.0832
100.000						-.0753	-.0737	-.0737	-.0753	-.0768	-.0768	-.0768	-.0780	-.0798	-.0832
110.000						-.0674	-.0706	-.0768	-.0831	-.0862	-.0878	-.0884	-.0884	-.0884	-.0884
120.000						-.0753								-.1905	
130.000						-.1081								-.1853	
140.000						-.1707								-.1421	
150.000						-.1723								-.1178	
160.000						-.1644								-.0971	
170.000						-.1629								-.1005	
180.000						-.1629	-.1582	-.1519	-.1472	-.1378	-.1284	-.1230	-.1178	-.1178	-.1144

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0815	-.0815	-.0850	-.0884	-.0919	-.1023	-.1139	-.1234	-.1330	-.1489	-.1601	-.1680	-.1760	-.1840	-.2010
100.000	-.0815	-.0832	-.0850	-.0867	-.0867	-.0884	-.0916	-.0963	-.1027	-.1043	-.1155	-.1250	-.1330	-.1410	-.1555
110.000	-.0902	-.0936	-.0953	-.0953	-.0867	-.0971	-.0995	-.1011	-.1011	-.1043	-.1043	-.1059	-.1091	-.1107	-.1198
120.000						-.1386								-.0932	
130.000						-.1537								-.1091	
140.000						-.1601								-.1123	
150.000						-.1043								-.1250	
160.000						-.0709								-.1155	
170.000						-.0724								-.1155	
180.000	-.1144	-.1161	-.1144	-.1178	-.1213	-.1250	-.1234	-.1218	-.1234	-.1202	-.1282	-.1314	-.1330	-.1378	-.1458

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.2123		
70.000							-.2172	-.2059	-.1945
80.000							-.2205	-.2123	-.1994
90.000	-.2042	-.2091	-.2123	-.2140	-.2156	-.2140	-.2075	-.2107	-.2059
100.000	-.1653	-.1783	-.1848	-.1864	-.1896	-.2059			
110.000	-.1280	-.1393	-.1507	-.1361	-.1166	-.1442			
120.000						.0213			
130.000						.0974			
140.000						-.0014			
150.000						.1391			
160.000						.0600			
170.000						.1276			
180.000	-.1393	-.1393	-.1507	-.1361	-.0793	.1836			

OA64 ORBITER ENTRY CONFIGURATION (RQ4002)

MACH (1) = 2.900 ALPHA (8) = 20.990 RN/L = 2.5001 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.0884	.0249	.0500												
70.000	.0355	.0529	.0598												
80.000	.0084	.0187	.0249												
90.000			.0080	-.0105	-.0611	-.0796	-.0780	-.0750	-.0765	-.0780	-.0780	-.0780	-.0801	-.0818	-.0818
100.000						-.0765	-.0750	-.0750	-.0765	-.0780	-.0780	-.0780	-.0784	-.0801	-.0818
110.000						-.0688	-.0719	-.0780	-.0825	-.0857	-.0873	-.0869	-.0869	-.0866	-.0869
120.000						-.0611								-.1910	
130.000						-.1057								-.1466	
140.000						-.1702								-.1210	
150.000						-.1702								-.0972	
160.000						-.1641								-.1023	
170.000						-.1610									
180.000						-.1610	-.1564	-.1502	-.1441	-.1349	-.1257	-.1228	-.1193	-.1210	-.1178

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0801	-.0801	-.0869	-.0920	-.0954	-.1108	-.1220	-.1328	-.1436	-.1590	-.1729	-.1791	-.1884	-.1946	-.2077
100.000	-.0801	-.0801	-.0818	-.0852	-.0869	-.0886	-.0895	-.0988	-.1019	-.1080	-.1204	-.1297	-.1374	-.1482	-.1661
110.000	-.0903	-.0937	-.0920	-.0920	-.0869	-.0954	-.0957	-.0972	-.0972	-.1003	-.1034	-.1080	-.1127	-.1142	-.1260
120.000						-.1364								-.1003	
130.000						-.1513								-.1111	
140.000						-.1590								-.1111	
150.000						-.1127								-.1250	
160.000						-.0802								-.1189	
170.000						-.0771								-.1189	
180.000	-.1178	-.1210	-.1228	-.1228	-.1296	-.1312	-.1297	-.1281	-.1297	-.1297	-.1343	-.1374	-.1390	-.1405	-.1453

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.2109		
70.000							-.2158	-.2126	-.1933
80.000							-.2206	-.2109	-.1933
90.000	-.2109	-.2158	-.2174	-.2174	-.2158	-.2158	-.2142	-.2109	-.2029
100.000	-.1773	-.1901	-.1949	-.1965	-.1981	-.2126			
110.000	-.1357	-.1485	-.1597	-.1501	-.1292	-.1629			
120.000						-.0043			
130.000						.0785			
140.000						.0905			
150.000						.1143			
160.000						.0469			
170.000						.1143			
180.000	-.1405	-.1469	-.1453	-.1341	-.0732	.1660			

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

OA64 ORBITER ENTRY CONFIGURATION (R04002)

MACH (2) = 2.950 ALPHA (1) = 8.000 RN/L = 2.5130 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1132	.1166	.0539												
70.000	.1166	.0818	.0808												
80.000	.1219	.0887	.0713												
90.000			.0852	.0225	-.0386	-.0543	-.0543	-.0508	-.0490	-.0490	-.0490	-.0490	-.0504	-.0504	-.0542
100.000						-.0421	-.0421	-.0421	-.0456	-.0490	-.0508	-.0525	-.0542	-.0561	-.0542
110.000						-.0490	-.0525	-.0543	-.0560	-.0630	-.0647	-.0658	-.0677	-.0677	-.0718
120.000						-.0316								-.0889	
130.000						-.0613								-.0928	
140.000						-.0996								-.0889	
150.000						-.0996								-.0812	
160.000						-.0979								-.0774	
170.000						-.0961								-.0735	
180.000						-.0961	-.0926	-.0892	-.0857	-.0839	-.0839	-.0812	-.0774	-.0793	-.0754

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0742	-.0561	-.0561	-.0600	-.0619	-.0619	-.0671	-.0707	-.0725	-.0725	-.0725	-.0707	-.0671	-.0653	-.0628
100.000	-.0542	-.0619	-.0619	-.0619	-.0600	-.0639	-.0689	-.0707	-.0725	-.0743	-.0725	-.0707	-.0671	-.0653	-.0556
110.000	-.0716	-.0677	-.0677	-.0677	-.0600	-.0677	-.0725	-.0707	-.0725	-.0689	-.0725	-.0707	-.0671	-.0653	-.0538
120.000						-.0581								-.0635	
130.000						-.0527								-.0455	
140.000						-.0545								-.0419	
150.000						-.0563								-.0419	
160.000						-.0581								-.0419	
170.000						-.0635								-.0455	
180.000	-.0735	-.0716	-.0677	-.0658	-.0619	-.0671	-.0653	-.0635	-.0617	-.0581	-.0563	-.0563	-.0653	-.0563	-.0538

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0954		
70.000							-.0773	-.0773	-.0755
80.000							-.0502	-.0628	-.0755
90.000	-.0538	-.0665	-.0737	-.0755	-.0719	-.0321	-.0375	-.0484	-.0628
100.000	-.0520	-.0556	-.0574	-.0574	-.0303	-.0393			
110.000	-.0502	-.0466	-.0411	-.0122	.0240	.0186			
120.000						.0873			
130.000						.1657			
140.000						.1593			
150.000						.2011			
160.000						.1090			
170.000						.1335			
180.000	-.0429	-.0466	-.0411	-.0285	.0439	.1144			

OA84 ORBITER ENTRY CONFIGURATION (R04002)

MACH (2) = 2.950 ALPHA (2) = 11.990 RN/L = 2.5130 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1052	.0832	.0484												
70.000	.0905	.0740	.0502												
80.000	.0850	.0704	.0812												
90.000			.0740	.0154	-.0469	-.0634	-.0634	-.0616	-.0597	-.0597	-.0597	-.0616	-.0657	-.0677	-.0718
100.000						-.0616	-.0597	-.0597	-.0616	-.0634	-.0634	-.0634	-.0698	-.0677	-.0718
110.000						-.0487	-.0542	-.0561	-.0597	-.0689	-.0725	-.0759	-.0780	-.0780	-.0841
120.000						-.0414								-.1190	
130.000						-.0817								-.1149	
140.000						-.1220								-.1108	
150.000						-.1238								-.1006	
160.000						-.1202								-.0965	
170.000						-.1202								-.0965	
180.000						-.1202	-.1165	-.1147	-.1110	-.1110	-.1092	-.1088	-.1047	-.1047	-.0985

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0739	-.0739	-.0759	-.0759	-.0780	-.0800	-.0799	-.0835	-.0835	-.0854	-.0854	-.0872	-.0872	-.0872	-.0904
100.000	-.0739	-.0800	-.0821	-.0841	-.0841	-.0841	-.0799	-.0835	-.0835	-.0835	-.0854	-.0872	-.0890	-.0872	-.0885
110.000	-.0862	-.0903	-.0944	-.0985	-.0800	-.0944	-.0890	-.0909	-.0909	-.0927	-.0927	-.0872	-.0872	-.0872	-.0847
120.000						-.1067								-.0744	
130.000						-.0835								-.0835	
140.000						-.0652								-.0652	
150.000						-.0597								-.0524	
160.000						-.0634								-.0524	
170.000						-.0689								-.0524	
180.000	-.0944	-.0944	-.0903	-.0882	-.0862	-.0780	-.0762	-.0707	-.0652	-.0616	-.0579	-.0579	-.0597	-.0616	-.0658

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1471		
70.000							-.1396	-.1339	-.1301
80.000							-.1036	-.1131	-.1263
90.000	-.0885	-.0979	-.1036	-.1093	-.1112	-.0847	-.0771	-.0904	-.0998
100.000	-.0866	-.0885	-.0904	-.0942	-.0715	-.0828			
110.000	-.0790	-.0771	-.0734	-.0450	-.0052	-.0128			
120.000						.0950			
130.000						.0988			
140.000						.0345			
150.000						.1834			
160.000						.0856			
170.000						.1513			
180.000	-.0801	-.0877	-.0734	-.0715	-.0298	.1737			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4002)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (3) = 15.990 RN/L = 2.5130 BETA = 4.0300

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1011	.0827	.0539												
70.000	.0731	.0679	.0470												
80.000	.0557	.0557	.0505												
90.000			.0627	.0208	-.0368	-.0525	-.0542	-.0525	-.0542	-.0560	-.0577	-.0595	-.0631	-.0631	-.0670
100.000						-.0525	-.0525	-.0525	-.0542	-.0577	-.0595	-.0612	-.0651	-.0631	-.0651
110.000						-.0473	-.0507	-.0542	-.0577	-.0630	-.0699	-.0767	-.0767	-.0767	-.0748
120.000						-.0385								-.1253	
130.000						-.0752								-.1117	
140.000						-.1170								-.1020	
150.000						-.1188								-.0884	
160.000						-.1153								-.0845	
170.000						-.1136								-.0865	
180.000						-.1136	-.1101	-.1085	-.1066	-.1048	-.1031	-.1020	-.0981	-.0942	-.0923

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0870	-.0890	-.0890	-.0709	-.0729	-.0729	-.0717	-.0769	-.0769	-.0822	-.0874	-.0874	-.0909	-.0961	-.1041
100.000	-.0870	-.0890	-.0890	-.0709	-.0729	-.0729	-.0717	-.0769	-.0769	-.0752	-.0769	-.0769	-.0787	-.0822	-.0847
110.000	-.0748	-.0787	-.0748	-.0748	-.0670	-.0787	-.0787	-.0769	-.0769	-.0822	-.0822	-.0787	-.0787	-.0822	-.0776
120.000						-.1059								-.0752	
130.000						-.1118								-.0839	
140.000						-.0926								-.0909	
150.000						-.0699								-.0699	
160.000						-.0595								-.0612	
170.000						-.0595								-.0612	
180.000	-.0923	-.0903	-.0923	-.0923	-.0942	-.0944	-.0909	-.0839	-.0856	-.0874	-.0874	-.0822	-.0822	-.0839	-.0918

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1412		
70.000							-.1430	-.1377	-.1324
80.000							-.1447	-.1430	-.1377
90.000	-.1078	-.1182	-.1218	-.1165	-.1200	-.1271	-.1306	-.1218	-.1253
100.000	-.0847	-.0953	-.0935	-.0865	-.0935	-.1165			
110.000	-.0778	-.0759	-.0706	-.0582	-.0476	-.0370			
120.000						.0972			
130.000						.0672			
140.000						-.0123			
150.000						.1417			
160.000						.0389			
170.000						.0937			
180.000	-.0882	-.0935	-.1006	-.0971	-.0817	.1433			

OA84 ORBITER ENTRY CONFIGURATION (RQ4002)

MACH (3) = 2.990 ALPHA (4) = 14.000 RN/L = 2.5130 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.1870	.1260	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1010	.0855	.0469												
70.000	.0805	.0674	.0489												
80.000	.0855	.0599	.0543												
90.000			.0674	.0170	-.0484	-.0652	-.0670	-.0652	-.0652	-.0652	-.0670	-.0689	-.0732	-.0753	-.0774
100.000						-.0689	-.0652	-.0652	-.0652	-.0652	-.0670	-.0708	-.0753	-.0753	-.0753
110.000						-.0521	-.0558	-.0596	-.0652	-.0726	-.0764	-.0815	-.0856	-.0877	-.0960
120.000						-.0446								-.1270	
130.000						-.0895								-.1208	
140.000						-.1305								-.1146	
150.000						-.1324								-.1042	
160.000						-.1287								-.1001	
170.000						-.1287								-.1001	
180.000						-.1287	-.1249	-.1231	-.1193	-.1193	-.1175	-.1166	-.1104	-.1084	-.1022

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0774	-.0794	-.0794	-.0815	-.0815	-.0856	-.0880	-.0899	-.0918	-.0937	-.0956	-.0975	-.0994	-.1013	-.1047
100.000	-.0815	-.0815	-.0815	-.0815	-.0836	-.0856	-.0880	-.0899	-.0918	-.0918	-.0937	-.0975	-.0956	-.1013	-.0971
110.000	-.0980	-.0939	-.0918	-.0918	-.0815	-.0918	-.0956	-.0918	-.0918	-.1013	-.1013	-.0975	-.0956	-.1013	-.0932
120.000						-.1166								-.0880	
130.000						-.1223								-.0975	
140.000						-.0916								-.0918	
150.000						-.0766								-.0690	
160.000						-.0709								-.0632	
170.000						-.0728								-.0632	
180.000	-.1001	-.1001	-.0980	-.0980	-.0960	-.0937	-.0899	-.0861	-.0804	-.0804	-.0823	-.0804	-.0823	-.0823	-.0875

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1584		
70.000							-.1603	-.1565	-.1469
80.000							-.1412	-.1412	-.1507
90.000	-.1087	-.1162	-.1220	-.1258	-.1277	-.1143	-.1047	-.1162	-.1277
100.000	-.0932	-.1009	-.1087	-.1086	-.0932	-.1105			
110.000	-.0894	-.0913	-.0894	-.0864	-.0147	-.0223			
120.000						.0984			
130.000						.0448			
140.000						-.0587			
150.000						.1914			
160.000						.1080			
170.000						.1336			
180.000	-.0837	-.0913	-.0990	-.1009	-.0587	.2396			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(RQ4002)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (5) = 18.000 RN/L = 2.5130 BETA = 4.0300

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0980	.0474	.0561												
70.000	.0813	.0830	.0457												
80.000	.0387	.0497	.0422												
90.000			.0457	.0145	-.0376	-.0549	-.0549	-.0549	-.0549	-.0566	-.0584	-.0584	-.0658	-.0658	-.0658
100.000						-.0532	-.0532	-.0532	-.0540	-.0584	-.0601	-.0601	-.0638	-.0638	-.0638
110.000						-.0480	-.0497	-.0549	-.0618	-.0670	-.0688	-.0696	-.0696	-.0696	-.0715
120.000						-.0497								-.1333	
130.000						-.0740								-.1140	
140.000						-.1191								-.1082	
150.000						-.1191								-.0928	
160.000						-.1156								-.0793	
170.000						-.1156								-.0831	
180.000						-.1156	-.1121	-.1104	-.1069	-.1052	-.1017	-.0986	-.0947	-.0947	-.0966

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0838	-.0838	-.0877	-.0877	-.0838	-.0696	-.0717	-.0769	-.0839	-.0891	-.0979	-.1031	-.1118	-.1153	-.1255
100.000	-.0838	-.0838	-.0838	-.0896	-.0696	-.0696	-.0700	-.0700	-.0700	-.0734	-.0769	-.0804	-.0839	-.0891	-.0957
110.000	-.0696	-.0715	-.0715	-.0715	-.0638	-.0754	-.0769	-.0700	-.0700	-.0787	-.0787	-.0804	-.0839	-.0787	-.0817
120.000						-.1082								-.0769	
130.000						-.1153								-.0874	
140.000						-.1136								-.0909	
150.000						-.0769								-.0891	
160.000						-.0595								-.0787	
170.000						-.0630								-.0787	
180.000	-.0966	-.0966	-.1024	-.1024	-.1082	-.1136	-.1136	-.1153	-.1153	-.1118	-.1031	-.0979	-.0996	-.1031	-.1062

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.1431		
60.000							-.1466	-.1449	-.1326
70.000							-.1484	-.1449	-.1378
80.000							-.1466	-.1343	-.1378
90.000	-.1238	-.1343	-.1381	-.1343	-.1343	-.1431			
100.000	-.0992	-.1115	-.1150	-.1062	-.1150	-.1326			
110.000	-.0817	-.0869	-.0852	-.0782	-.0746	-.0711			
120.000						.0938			
130.000						.0938			
140.000						.0961			
150.000						.1079			
160.000						.0307			
170.000						.0587			
180.000	-.1027	-.1062	-.1062	-.0922	-.0624	.1561			

OA64 ORBITER ENTRY CONFIGURATION (R04002)

MACH (2) = 2.950 ALPHA (6) = 20.020 RN/L = 2.5130 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1840	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.0943	.0901	.0581												
70.000	.0492	.0596	.0457												
80.000	.0249	.0318	.0371												
90.000			.0249	.0024	-.0410	-.0583	-.0583	-.0583	-.0585	-.0601	-.0618	-.0653	-.0657	-.0658	-.0657
100.000						-.0583	-.0583	-.0583	-.0601	-.0618	-.0618	-.0636	-.0658	-.0658	-.0657
110.000						-.0549	-.0583	-.0618	-.0653	-.0688	-.0688	-.0696	-.0715	-.0715	-.0696
120.000						-.0549								-.1391	
130.000						-.0774								-.1429	
140.000						-.1243								-.1101	
150.000						-.1243								-.1005	
160.000						-.1208								-.0812	
170.000						-.1191								-.0870	
180.000						-.1191	-.1173	-.1139	-.1121	-.1087	-.1052	-.1024	-.1024	-.1024	-.1083

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0657	-.0619	-.0636	-.0657	-.0696	-.0792	-.0856	-.0926	-.1013	-.1136	-.1223	-.1310	-.1327	-.1380	-.1551
100.000	-.0657	-.0677	-.0657	-.0677	-.0657	-.0677	-.0682	-.0717	-.0752	-.0804	-.0856	-.0909	-.0961	-.1048	-.1204
110.000	-.0696	-.0715	-.0715	-.0735	-.0638	-.0735	-.0734	-.0734	-.0752	-.0787	-.0769	-.0804	-.0821	-.0839	-.0931
120.000						-.1101								-.0821	
130.000						-.1170								-.0944	
140.000						-.1205								-.0926	
150.000						-.0944								-.1013	
160.000						-.0699								-.0978	
170.000						-.0769								-.0978	
180.000	-.1083	-.1082	-.1121	-.1159	-.1198	-.1223	-.1240	-.1240	-.1223	-.1170	-.1153	-.1101	-.1118	-.1136	-.1223

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1551		
70.000							-.1587	-.1551	-.1459
80.000							-.1605	-.1551	-.1496
90.000	-.1551	-.1605	-.1605	-.1587	-.1587	-.1605	-.1605	-.1587	-.1514
100.000	-.1298	-.1405	-.1441	-.1405	-.1441	-.1569			
110.000	-.0988	-.1077	-.1113	-.1041	-.1022	-.1059			
120.000						.0453			
130.000						.0726			
140.000						-.0002			
150.000						.0781			
160.000						-.0002			
170.000						.0344			
180.000	-.1188	-.1150	-.1095	-.0931	-.0731	.1090			

OA84 ORBITER ENTRY CONFIGURATION (R84002)

MACH (2) = 2.950 ALPHA (7) = 20.950 RN/L = 2.5130 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0912	.0121	.0534												
70.000	.0409	.0552	.0427												
80.000	.0121	.0229	.0301												
90.000			.0103	-.0077	-.0491	-.0652	-.0670	-.0652	-.0670	-.0688	-.0688	-.0706	-.0690	-.0690	-.0710
100.000						-.0688	-.0688	-.0670	-.0688	-.0688	-.0706	-.0706	-.0750	-.0730	-.0710
110.000						-.0634	-.0670	-.0724	-.0742	-.0778	-.0778	-.0750	-.0770	-.0770	-.0770
120.000						-.0670								-.1483	
130.000						-.0886								-.1503	
140.000						-.1354								-.1186	
150.000						-.1354								-.1087	
160.000						-.1318								-.0888	
170.000						-.1282								-.0948	
180.000						-.1300	-.1264	-.1228	-.1210	-.1174	-.1138	-.1126	-.1126	-.1126	-.1146

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0890	-.0870	-.0750	-.0770	-.0789	-.0869	-.0990	-.1117	-.1262	-.1388	-.1497	-.1533	-.1587	-.1623	-.1678
100.000	-.0750	-.0730	-.0710	-.0710	-.0690	-.0730	-.0773	-.0809	-.0845	-.0900	-.0990	-.1099	-.1225	-.1298	-.1420
110.000	-.0770	-.0789	-.0789	-.0770	-.0591	-.0770	-.0773	-.0809	-.0809	-.0809	-.0863	-.0900	-.0936	-.0972	-.1033
120.000						-.1166								-.0972	
130.000						-.1262								-.1063	
140.000						-.1280								-.1063	
150.000						-.1117								-.1117	
160.000						-.0845								-.1135	
170.000						-.0900								-.1135	
180.000	-.1166	-.1206	-.1245	-.1265	-.1285	-.1352	-.1352	-.1352	-.1316	-.1280	-.1243	-.1225	-.1262	-.1280	-.1291

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1605		
70.000							-.1642	-.1605	-.1494
80.000							-.1660	-.1605	-.1531
90.000	-.1670	-.1697	-.1678	-.1660	-.1678	-.1678	-.1697	-.1623	-.1586
100.000	-.1512	-.1586	-.1642	-.1605	-.1623	-.1678			
110.000	-.1107	-.1236	-.1273	-.1217	-.1254	-.1383			
120.000						.0405			
130.000						.0479			
140.000						-.0093			
150.000						.0497			
160.000						-.0093			
170.000						.0295			
180.000	-.1238	-.1238	-.1125	-.0959	-.0793	.0866			

OA64 ORBITER ENTRY CONFIGURATION (RQ4002)

MACH (3) = 4.000 ALPHA (1) = 7.990 RN/L = 3.4946 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI															
60.000	.1083	.0918	.0323												
70.000	.1118	.0770	.0556												
80.000	.1132	.0803	.0655												
90.000			.0754	.0293	-.0168	-.0284	-.0300	-.0317	-.0333	-.0333	-.0333	-.0333	-.0347	-.0347	-.0365
100.000						-.0284	-.0300	-.0300	-.0317	-.0317	-.0317	-.0333	-.0347	-.0347	-.0365
110.000						-.0284	-.0300	-.0300	-.0300	-.0333	-.0350	-.0383	-.0402	-.0402	-.0420
120.000						-.0070								-.0565	
130.000						-.0234								-.0547	
140.000						-.0481								-.0547	
150.000						-.0498								-.0511	
160.000						-.0498								-.0493	
170.000						-.0498								-.0493	
180.000						-.0498	-.0498	-.0498	-.0498	-.0481	-.0481	-.0495	-.0495	-.0495	-.0495

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0383	-.0383	-.0383	-.0383	-.0402	-.0402	-.0469	-.0486	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0410
100.000	-.0383	-.0383	-.0402	-.0402	-.0402	-.0420	-.0486	-.0486	-.0486	-.0486	-.0503	-.0503	-.0503	-.0503	-.0426
110.000	-.0420	-.0420	-.0420	-.0420	-.0365	-.0438	-.0486	-.0486	-.0503	-.0486	-.0503	-.0503	-.0503	-.0486	-.0410
120.000						-.0438								-.0486	
130.000						-.0418								-.0384	
140.000						-.0452								-.0384	
150.000						-.0469								-.0384	
160.000						-.0503								-.0384	
170.000						-.0503									
180.000	-.0493	-.0474	-.0474	-.0456	-.0438	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0503	-.0452	-.0376

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8520	.9000	.9400
PHI									
60.000							-.0660		
70.000							-.0510	-.0443	-.0460
80.000							-.0326	-.0326	-.0393
90.000	-.0393	-.0426	-.0460	-.0460	-.0460	-.0310	-.0210	-.0243	-.0326
100.000	-.0393	-.0410	-.0393	-.0376	-.0310	-.0426			
110.000	-.0393	-.0393	-.0360	-.0226	-.0026	.0040			
120.000						.0373			
130.000						.1007			
140.000						.0873			
150.000						.1257			
160.000						.0174			
170.000						.0473			
180.000	-.0360	-.0393	-.0393	-.0376	-.0243	.0440			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

OA64 ORBITER ENTRY CONFIGURATION (RG4002)

MACH (3) = 4.000 ALPHA (2) = 10.010 RN/L = 3.4946 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1036	.0970	.0525												
70.000	.1020	.0739	.0541												
80.000	.0987	.0739	.0824												
90.000			.0739	.0311	-.0134	-.0266	-.0299	-.0299	-.0516	-.0516	-.0316	-.0332	-.0364	-.0383	-.0401
100.000						-.7283	-.0299	-.0316	-.0332	-.0332	-.0332	-.0349	-.0383	-.0383	-.0383
110.000						-.0233	-.0266	-.0283	-.0283	-.0332	-.0349	-.0401	-.0419	-.0419	-.0437
120.000						-.0102								-.0565	
130.000						-.0283								-.0583	
140.000						-.0514								-.0583	
150.000						-.0547								-.0565	
160.000						-.0547								-.0547	
170.000						-.0547								-.0547	
180.000						-.0530	-.0530	-.0530	-.0530	-.0530	-.0530	-.0565	-.0547	-.0547	-.0547

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0401	-.0419	-.0419	-.0437	-.0437	-.0456	-.0448	-.0448	-.0464	-.0464	-.0464	-.0481	-.0481	-.0464	-.0492
100.000	-.0401	-.0437	-.0437	-.0437	-.0474	-.0474	-.0464	-.0481	-.0464	-.0464	-.0481	-.0464	-.0481	-.0464	-.0492
110.000	-.0437	-.0419	-.0474	-.0474	-.0419	-.0510	-.0464	-.0464	-.0464	-.0464	-.0481	-.0464	-.0481	-.0464	-.0476
120.000						-.0528								-.0464	
130.000						-.0415								-.0398	
140.000						-.0365								-.0349	
150.000						-.0398								-.0349	
160.000						-.0415								-.0332	
170.000						-.0448								-.0332	
180.000	-.0547	-.0528	-.0510	-.0510	-.0510	-.0497	-.0497	-.0481	-.0464	-.0464	-.0481	-.0464	-.0481	-.0481	-.0492

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0726		
70.000							-.0693	-.0659	-.0659
80.000							-.0526	-.0476	-.0526
90.000	-.0478	-.0492	-.0509	-.0526	-.0542	-.0476	-.0309	-.0342	-.0409
100.000	-.0459	-.0476	-.0476	-.0476	-.0426	-.0442			
110.000	-.0459	-.0442	-.0442	-.0342	-.0092	.0108			
120.000						.0692			
130.000						.0525			
140.000						.0542			
150.000						.0993			
160.000						.0308			
170.000						.0542			
180.000	-.0459	-.0309	-.0426	-.0342	-.0309	.0792			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063) (RQ40012)

OA84 ORBITER ENTRY CONFIGURATION

MACH (S) = 4.000 ALPHA (D) = 12.000 RN/L = 3.4946 BETA = 4.0300

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.0999	.0884	.0509												
70.000	.0897	.0695	.0509												
80.000	.0830	.0681	.0576												
90.000			.0678	.0306	-.0150	-.0285	-.0336	-.0336	-.0352	-.0352	-.0369	-.0386	-.0425	-.0444	-.0462
100.000						-.0319	-.0336	-.0352	-.0369	-.0386	-.0386	-.0403	-.0444	-.0444	-.0462
110.000						-.0268	-.0302	-.0319	-.0352	-.0386	-.0403	-.0444	-.0481	-.0481	-.0519
120.000						-.0184								-.0650	
130.000						-.0369								-.0631	
140.000						-.0606								-.0631	
150.000						-.0623								-.0612	
160.000						-.0623								-.0612	
170.000						-.0623								-.0612	
180.000						-.0640	-.0640	-.0623	-.0623	-.0623	-.0623	-.0631	-.0631	-.0631	-.0631

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0481	-.0481	-.0500	-.0500	-.0500	-.0519	-.0488	-.0504	-.0504	-.0521	-.0521	-.0555	-.0538	-.0538	-.0534
100.000	-.0482	-.0519	-.0537	-.0537	-.0519	-.0519	-.0504	-.0504	-.0504	-.0521	-.0521	-.0538	-.0538	-.0538	-.0534
110.000	-.0537	-.0556	-.0575	-.0593	-.0519	-.0593	-.0555	-.0521	-.0521	-.0521	-.0521	-.0538	-.0538	-.0538	-.0551
120.000						-.0631								-.0521	
130.000						-.0555								-.0555	
140.000						-.0454								-.0488	
150.000						-.0437								-.0420	
160.000						-.0471								-.0420	
170.000						-.0521								-.0420	
180.000	-.0812	-.0831	-.0831	-.0831	-.0831	-.0606	-.0640	-.0640	-.0656	-.0690	-.0707	-.0724	-.0775	-.0808	-.0790

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0790		
70.000							-.0824	-.0790	-.0756
80.000							-.0739	-.0773	-.0790
90.000	-.0934	-.0819	-.0836	-.0819	-.0802	-.0568	-.0602	-.0602	-.0619
100.000	-.0934	-.0951	-.0551	-.0483	-.0465	-.0551			
110.000	-.0551	-.0534	-.0485	-.0380	-.0329	-.0141			
120.000						.0748			
130.000						.0441			
140.000						-.0106			
150.000						.0988			
160.000						.0201			
170.000						.0424			
180.000	-.0773	-.0798	-.0722	-.0585	-.0465	.0663			

OA84 ORBITER ENTRY CONFIGURATION (RQ4002)

MACH (3) = 4.000 ALPHA (4) = 14.010 RN/L = 3.4946 BETA = 4.0900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1200	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0954	.0719	.0500												
70.000	.0803	.0851	.0450												
80.000	.0885	.0584	.0517												
90.000			.0801	.0282	-.0137	-.0289	-.0305	-.0322	-.0339	-.0356	-.0372	-.0389	-.0447	-.0447	-.0484
100.000						-.0305	-.0322	-.0339	-.0339	-.0372	-.0389	-.0406	-.0465	-.0447	-.0484
110.000						-.0289	-.0322	-.0339	-.0372	-.0423	-.0456	-.0502	-.0521	-.0540	-.0577
120.000						-.0235								-.0670	
130.000						-.0406								-.0651	
140.000						-.0624								-.0651	
150.000						-.0658								-.0633	
160.000						-.0658								-.0633	
170.000						-.0658								-.0633	
180.000						-.0658	-.0658	-.0641	-.0641	-.0641	-.0641	-.0651	-.0651	-.0651	-.0651

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0484	-.0484	-.0484	-.0484	-.0484	-.0502	-.0488	-.0504	-.0504	-.0504	-.0521	-.0521	-.0538	-.0538	-.0618
100.000	-.0484	-.0502	-.0521	-.0484	-.0502	-.0521	-.0504	-.0521	-.0504	-.0504	-.0521	-.0538	-.0538	-.0538	-.0566
110.000	-.0577	-.0577	-.0558	-.0540	-.0502	-.0540	-.0504	-.0521	-.0572	-.0504	-.0521	-.0538	-.0521	-.0538	-.0583
120.000						-.0670								-.0572	
130.000						-.0656								-.0606	
140.000						-.0572								-.0606	
150.000						-.0504								-.0488	
160.000						-.0504								-.0471	
170.000						-.0572								-.0521	
180.000	-.0870	-.0870	-.0870	-.0707	-.0707	-.0724	-.0741	-.0741	-.0775	-.0775	-.0825	-.0842	-.0825	-.0842	-.0841

X/L	.7290	.7470	.7870	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0824		
70.000							-.0876	-.0841	-.0841
80.000							-.0893	-.0858	-.0858
90.000	-.0852	-.0704	-.0738	-.0686	-.0869	-.0755	-.0824	-.0824	-.0704
100.000	-.0566	-.0600	-.0549	-.0480	-.0532	-.0721			
110.000	-.0549	-.0532	-.0446	-.0394	-.0394	-.0480			
120.000						.0965			
130.000						.0311			
140.000						-.0136			
150.000						.0776			
160.000						.0088			
170.000						.0157			
180.000	-.0841	-.0824	-.0686	-.0532	-.0480	.0810			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (R04002)

OA64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (5) = 16.000 RN/L = 3.4946 BETA = 4.0900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0985	.0810	.0326												
70.000	.0728	.0627	.0458												
80.000	.0560	.0526	.0441												
90.000			.0526	.0256	-.0167	-.0302	-.0336	-.0336	-.0352	-.0369	-.0386	-.0403	-.0447	-.0447	-.0447
100.000						-.0319	-.0319	-.0336	-.0369	-.0386	-.0403	-.0420	-.0447	-.0447	-.0447
110.000						-.0302	-.0319	-.0352	-.0386	-.0437	-.0471	-.0502	-.0521	-.0521	-.0521
120.000						-.0302								-.0744	
130.000						-.0437								-.0688	
140.000						-.0673								-.0651	
150.000						-.0673								-.0614	
160.000						-.0673								-.0614	
170.000						-.0673								-.0614	
180.000						-.0673	-.0673	-.0673	-.0673	-.0656	-.0656	-.0670	-.0688	-.0688	-.0688

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0447	-.0447	-.0447	-.0447	-.0465	-.0465	-.0488	-.0488	-.0504	-.0504	-.0538	-.0572	-.0623	-.0656	-.0704
100.000	-.0447	-.0465	-.0465	-.0447	-.0484	-.0484	-.0504	-.0504	-.0488	-.0504	-.0538	-.0504	-.0521	-.0555	-.0583
110.000	-.0521	-.0502	-.0502	-.0502	-.0484	-.0521	-.0555	-.0521	-.0488	-.0521	-.0538	-.0555	-.0521	-.0555	-.0566
120.000						-.0688								-.0589	
130.000						-.0707								-.0606	
140.000						-.0673								-.0623	
150.000						-.0572								-.0589	
160.000						-.0538								-.0521	
170.000						-.0606								-.0606	
180.000	-.0688	-.0707	-.0728	-.0744	-.0744	-.0792	-.0808	-.0792	-.0842	-.0859	-.0876	-.0876	-.0859	-.0842	-.0824

X/L	.7290	.7470	.7670	.7850	.8090	.8290	.8620	.9000	.9400
PHI									
80.000							-.0824		
70.000							-.0876	-.0893	-.0876
80.000							-.0893	-.0876	-.0876
90.000	-.0738	-.0790	-.0824	-.0790	-.0790	-.0841	-.0893	-.0876	-.0841
100.000	-.0566	-.0652	-.0686	-.0600	-.0669	-.0807			
110.000	-.0566	-.0549	-.0463	-.0394	-.0463	-.0377			
120.000						.1120			
130.000						.0449			
140.000						.0071			
150.000						.0552			
160.000						-.0205			
170.000						-.0015			
180.000	-.0807	-.0738	-.0652	-.0549	-.0566	.0673			

OA84 ORBITER ENTRY CONFIGURATION (R84002)

MACH (3) = 4.000 ALPHA (6) = 18.000 RN/L = 3.4946 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2050	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.0931	.0484	.0533												
70.000	.0833	.0816	.0467												
80.000	.0451	.0434	.0384												
90.000			.0401	.0169	-.0196	-.0312	-.0329	-.0346	-.0346	-.0362	-.0362	-.0395	-.0419	-.0401	-.0419
100.000						-.0312	-.0329	-.0346	-.0362	-.0362	-.0379	-.0395	-.0419	-.0437	-.0401
110.000						-.0293	-.0329	-.0362	-.0395	-.0412	-.0445	-.0474	-.0474	-.0474	-.0474
120.000						-.0312								-.0765	
130.000						-.0412								-.0747	
140.000						-.0661								-.0656	
150.000						-.0661								-.0620	
160.000						-.0661								-.0565	
170.000						-.0661								-.0583	
180.000						-.0661	-.0661	-.0644	-.0644	-.0644	-.0644	-.0674	-.0674	-.0674	-.0692

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0401	-.0401	-.0401	-.0401	-.0401	-.0401	-.0459	-.0476	-.0509	-.0559	-.0609	-.0659	-.0726	-.0793	-.0825
100.000	-.0401	-.0437	-.0401	-.0437	-.0437	-.0437	-.0442	-.0459	-.0442	-.0442	-.0476	-.0492	-.0526	-.0559	-.0638
110.000	-.0474	-.0474	-.0474	-.0474	-.0419	-.0474	-.0492	-.0476	-.0442	-.0442	-.0476	-.0476	-.0526	-.0492	-.0536
120.000						-.0674								-.0576	
130.000						-.0693								-.0609	
140.000						-.0676								-.0609	
150.000						-.0609								-.0643	
160.000						-.0526								-.0626	
170.000						-.0609								-.0626	
180.000	-.0711	-.0729	-.0729	-.0729	-.0729	-.0759	-.0776	-.0776	-.0809	-.0793	-.0809	-.0793	-.0793	-.0776	-.0740

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0808		
70.000							-.0859	-.0859	-.0825
80.000							-.0859	-.0859	-.0825
90.000	-.0825	-.0825	-.0825	-.0825	-.0825	-.0859	-.0876	-.0859	-.0825
100.000	-.0872	-.0723	-.0757	-.0708	-.0757	-.0842			
110.000	-.0553	-.0604	-.0536	-.0485	-.0519	-.0570			
120.000						.0789			
130.000						.0636			
140.000						.0093			
150.000						.0399			
160.000						-.0332			
170.000						-.0281			
180.000	-.0723	-.0738	-.0655	-.0553	-.0519	.0382			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (R04002)

OA64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (7) = 20.000 RN/L = 3.4946 BETA = 4.0300

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0087	.0288	.0491												
70.000	.0491	.0342	.0423												
80.000	.0289	.0305	.0320												
90.000			.0218	.0030	-.0278	-.0397	-.0414	-.0414	-.0414	-.0432	-.0449	-.0466	-.0480	-.0479	-.0480
100.000						-.0414	-.0432	-.0432	-.0432	-.0449	-.0466	-.0466	-.0497	-.0516	-.0480
110.000						-.0414	-.0432	-.0466	-.0483	-.0500	-.0500	-.0516	-.0554	-.0535	-.0554
120.000						-.0414								-.0655	
130.000						-.0534								-.0655	
140.000						-.0773								-.0780	
150.000						-.0773								-.0725	
160.000						-.0756								-.0629	
170.000						-.0773								-.0686	
180.000						-.0756	-.0756	-.0756	-.0756	-.0756	-.0756	-.0780	-.0799	-.0799	-.0836

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6750	.6880	.7100
PHI															
90.000	-.0480	-.0441	-.0441	-.0480	-.0480	-.0479	-.0532	-.0652	-.0755	-.0824	-.0910	-.0927	-.0927	-.0962	-.0998
100.000	-.0479	-.0497	-.0479	-.0480	-.0479	-.0479	-.0480	-.0497	-.0497	-.0515	-.0566	-.0652	-.0738	-.0807	-.0893
110.000	-.0535	-.0554	-.0554	-.0554	-.0479	-.0554	-.0532	-.0497	-.0497	-.0497	-.0549	-.0549	-.0566	-.0601	-.0665
120.000						-.0761								-.0601	
130.000						-.0790								-.0687	
140.000						-.0790								-.0721	
150.000						-.0755								-.0738	
160.000						-.0669								-.0755	
170.000						-.0721								-.0755	
180.000	-.0836	-.0836	-.0836	-.0836	-.0836	-.0858	-.0876	-.0893	-.0893	-.0910	-.0876	-.0858	-.0824	-.0841	-.0840

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.0910		
80.000							-.0963	-.0945	-.0910
70.000							-.0963	-.0928	-.0910
80.000							-.0963	-.0910	-.0910
90.000	-.0980	-.0963	-.0980	-.0980	-.0963	-.0963			
100.000	-.0928	-.0963	-.0980	-.0963	-.0963	-.0945			
110.000	-.0700	-.0770	-.0805	-.0770	-.0840	-.0945			
120.000						.0526			
130.000						.0493			
140.000						-.0087			
150.000						-.0017			
160.000						-.0437			
170.000						-.0315			
180.000	-.0823	-.0770	-.0700	-.0648	-.0613	-.0157			

OA64 ORBITER ENTRY CONFIGURATION (RQ4002)

MACH (3) = 4.000 ALPHA (8) = 20.970 RN/L = 3.4946 BETA = 4.0300

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI															
60.000	.0862	.0272	.0525												
70.000	.0457	.0559	.0440												
80.000	.0238	.0288	.0339												
90.000			.0187	.0035	-.0252	-.0353	-.0387	-.0370	-.0387	-.0387	-.0403	-.0403	-.0410	-.0410	-.0410
100.000						-.0403	-.0403	-.0403	-.0403	-.0420	-.0420	-.042	-.0466	-.0466	-.0447
110.000						-.0403	-.0420	-.0437	-.0454	-.0471	-.0471	-.0484	-.0484	-.0484	-.0521
120.000						-.0420								-.0837	
130.000						-.0538								-.0819	
140.000						-.0741								-.0781	
150.000						-.0758								-.0707	
160.000						-.0741								-.0614	
170.000						-.0741								-.0679	
180.000						-.0741	-.0741	-.0724	-.0724	-.0724	-.0741	-.0763	-.0781	-.0800	-.0800

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0331	-.0391	-.0391	-.0410	-.0391	-.0503	-.0638	-.0774	-.0842	-.0910	-.0927	-.0944	-.0944	-.0961	-.0979
100.000	-.0447	-.0447	-.0428	-.0428	-.0391	-.0447	-.0468	-.0468	-.0485	-.0536	-.0655	-.0740	-.0808	-.0859	-.0927
110.000	-.0503	-.0503	-.0503	-.0503	-.0410	-.0484	-.0502	-.0468	-.0485	-.0536	-.0536	-.0570	-.0570	-.0604	-.0668
120.000						-.0726								-.0655	
130.000						-.0774								-.0706	
140.000						-.0774								-.0740	
150.000						-.0774								-.0740	
160.000						-.0689								-.0740	
170.000						-.0740								-.0774	
180.000	-.0819	-.0819	-.0800	-.0800	-.0819	-.0876	-.0893	-.0893	-.0893	-.0876	-.0842	-.0842	-.0825	-.0825	-.0806

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0858		
70.000							-.0893	-.0876	-.0824
80.000							-.0910	-.0858	-.0858
90.000	-.0945	-.0962	-.0945	-.0927	-.0927	-.0910	-.0910	-.0841	-.0876
100.000	-.0927	-.0962	-.0945	-.0945	-.0945	-.0910			
110.000	-.0754	-.0824	-.0876	-.0841	-.0893	-.0945			
120.000						.0093			
130.000						.0353			
140.000						-.0149			
150.000						-.0063			
160.000						-.0409			
170.000						-.0253			
180.000	-.0772	-.0720	-.0485	-.0633	-.0599	-.0080			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4002)

OA64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (1) = 8.010 RN/L = 3.5000 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1017	.0848	.0475												
70.000	.1032	.0898	.0527												
80.000	.1047	.0735	.0601												
90.000			.0690	.0275	-.0119	-.0215	-.0245	-.0260	-.0275	-.0290	-.0297	-.0305	-.0326	-.0326	-.0332
100.000						-.0223	-.0245	-.0253	-.0282	-.0290	-.0305	-.0312	-.0332	-.0339	-.0352
110.000						-.0238	-.0260	-.0267	-.0282	-.0297	-.0312	-.0326	-.0345	-.0345	-.0359
120.000						-.0067								-.0470	
130.000						-.0193								-.0463	
140.000						-.0386								-.0463	
150.000						-.0416								-.0457	
160.000						-.0416								-.0444	
170.000						-.0423								-.0444	
180.000						-.0408	-.0416	-.0416	-.0423	-.0431	-.0431	-.0437	-.0444	-.0437	-.0437

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0339	-.0345	-.0352	-.0359	-.0365	-.0378	-.0387	-.0395	-.0402	-.0418	-.0418	-.0418	-.0418	-.0418	-.0337
100.000	-.0359	-.0359	-.0365	-.0372	-.0378	-.0391	-.0395	-.0395	-.0410	-.0418	-.0418	-.0418	-.0418	-.0410	-.0357
110.000	-.0359	-.0365	-.0365	-.0372	-.0208	-.0398	-.0402	-.0410	-.0418	-.0418	-.0418	-.0418	-.0418	-.0410	-.0328
120.000						-.0411								-.0410	
130.000						-.0349								-.0319	
140.000						-.0380								-.0311	
150.000						-.0395								-.0311	
160.000						-.0410								-.0334	
170.000						-.0418								-.0395	
180.000	-.0437	-.0431	-.0424	-.0424	-.0417	-.0425	-.0425	-.0402	-.0402	-.0418	-.0418	-.0418	-.0418	-.0433	-.0354

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.0495		
80.000							-.0433	-.0381	-.0354
70.000							-.0293	-.0266	-.0240
80.000							-.0161	-.0179	-.0231
90.000	-.0328	-.0345	-.0363	-.0372	-.0363	-.0284			
100.000	-.0328	-.0337	-.0319	-.0284	-.0240	-.0275			
110.000	-.0328	-.0310	-.0275	-.0205	-.0062	.0032			
120.000						.0234			
130.000						.0368			
140.000						.0699			
150.000						.0682			
160.000						.0058			
170.000						.0050			
180.000	-.0345	-.0354	-.0345	-.0319	-.0302	-.0082			

OA64 ORBITER ENTRY CONFIGURATION (RQ4002)

MACH (4) = 4.500 ALPHA (2) = 10.020 RN/L = 3.5000 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0941	.0856	.0413												
70.000	.0895	.0823	.0444												
80.000	.0863	.0815	.0514												
90.000			.0607	.0219	-.0185	-.0294	-.0325	-.0348	-.0356	-.0371	-.0403	-.0434	-.0434	-.0440	-.0454
100.000						-.0317	-.0379	-.0364	-.0379	-.0387	-.0418	-.0449	-.0454	-.0461	-.0468
110.000						-.0333	-.0348	-.0364	-.0410	-.0403	-.0457	-.0440	-.0461	-.0468	-.0488
120.000						-.0208								-.0576	
130.000						-.0340								-.0597	
140.000						-.0527								-.0597	
150.000						-.0550								-.0590	
160.000						-.0558								-.0583	
170.000						-.0566								-.0583	
180.000						-.0550	-.0558	-.0558	-.0573	-.0573	-.0581	-.0590	-.0590	-.0590	-.0583

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0488	-.0481	-.0495	-.0508	-.0515	-.0529	-.0496	-.0504	-.0512	-.0512	-.0512	-.0512	-.0512	-.0512	-.0520
100.000	-.0481	-.0495	-.0502	-.0515	-.0522	-.0536	-.0512	-.0527	-.0527	-.0527	-.0519	-.0519	-.0512	-.0519	-.0511
110.000	-.0502	-.0515	-.0536	-.0536	-.0413	-.0570	-.0543	-.0543	-.0550	-.0543	-.0535	-.0535	-.0527	-.0527	-.0502
120.000						-.0576								-.0504	
130.000						-.0481								-.0481	
140.000						-.0465								-.0427	
150.000						-.0481								-.0419	
160.000						-.0481								-.0434	
170.000						-.0504								-.0527	
180.000	-.0583	-.0576	-.0576	-.0576	-.0576	-.0566	-.0566	-.0566	-.0574	-.0535	-.0589	-.0589	-.0605	-.0605	-.0585

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0678		
70.000							-.0687	-.0687	-.0641
80.000							-.0585	-.0613	-.0631
90.000	-.0511	-.0529	-.0548	-.0539	-.0511	-.0492	-.0492	-.0492	-.0502
100.000	-.0520	-.0520	-.0502	-.0474	-.0445	-.0455			
110.000	-.0520	-.0502	-.0483	-.0409	-.0326	-.0187			
120.000						.0443			
130.000						.0286			
140.000						.0230			
150.000						.0462			
160.000						.0017			
170.000						-.0140			
180.000	-.0578	-.0548	-.0529	-.0511	-.0492	-.0298			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1083) (RQ4002)

OA64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (3) = 12.010 RN/L = 3.5000 BETA = 4.0500

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0887	.0871	.0389												
70.000	.0771	.0555	.0361												
80.000	.0686	.0508	.0431												
90.000			.0516	.0191	-.0160	-.0288	-.0327	-.0342	-.0358	-.0365	-.0389	-.0412	-.0434	-.0448	-.0468
100.000						-.0319	-.0350	-.0358	-.0381	-.0396	-.0412	-.0435	-.0455	-.0468	-.0495
110.000						-.0319	-.0381	-.0389	-.0389	-.0427	-.0450	-.0475	-.0502	-.0516	-.0529
120.000						-.0280								-.0597	
130.000						-.0389								-.0597	
140.000						-.0566								-.0597	
150.000						-.0590								-.0590	
160.000						-.0597								-.0597	
170.000						-.0605								-.0597	
180.000						-.0605	-.0636	-.0605	-.0605	-.0597	-.0605	-.0604	-.0604	-.0611	-.0611

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0495	-.0509	-.0509	-.0509	-.0509	-.0509	-.0525	-.0525	-.0541	-.0533	-.0541	-.0549	-.0541	-.0541	-.0520
100.000	-.0509	-.0522	-.0529	-.0536	-.0543	-.0536	-.0541	-.0541	-.0556	-.0549	-.0556	-.0564	-.0564	-.0556	-.0501
110.000	-.0549	-.0563	-.0570	-.0583	-.0468	-.0577	-.0588	-.0588	-.0580	-.0572	-.0580	-.0580	-.0580	-.0556	-.0492
120.000						-.0624								-.0564	
130.000						-.0596								-.0580	
140.000						-.0525								-.0541	
150.000						-.0509								-.0494	
160.000						-.0541								-.0486	
170.000						-.0572								-.0643	
180.000	-.0811	-.0817	-.0817	-.0824	-.0824	-.0666	-.0666	-.0643	-.0682	-.0690	-.0713	-.0721	-.0737	-.0737	-.0659

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0687		
70.000							-.0724	-.0687	-.0678
80.000							-.0705	-.0715	-.0715
90.000	-.0510	-.0557	-.0548	-.0492	-.0510	-.0548	-.0603	-.0631	-.0659
100.000	-.0492	-.0501	-.0427	-.0390	-.0417	-.0529			
110.000	-.0483	-.0445	-.0380	-.0352	-.0362	-.0436			
120.000						.0623			
130.000						.0121			
140.000						-.0213			
150.000						.0521			
160.000						-.0102			
170.000						.0019			
180.000	-.0859	-.0850	-.0822	-.0575	-.0520	.0056			

OA64 ORBITER ENTRY CONFIGURATION (RQ4002)

MACH (4) = 4.500 ALPHA (4) = 14.000 RN/L = 3.5000 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0897	.0851	.0435												
70.000	.0725	.0599	.0412												
80.000	.0621	.0524	.0450												
90.000			.0539	.0278	-.0094	-.0206	-.0236	-.0251	-.0296	-.0325	-.0303	-.0325	-.0363	-.0376	-.0396
100.000						-.0221	-.0243	-.0266	-.0318	-.0340	-.0333	-.0348	-.0389	-.0402	-.0415
110.000						-.0221	-.0258	-.0288	-.0363	-.0392	-.0378	-.0415	-.0442	-.0448	-.0468
120.000						-.0228								-.0547	
130.000						-.0325								-.0527	
140.000						-.0489								-.0514	
150.000						-.0512								-.0514	
160.000						-.0556								-.0521	
170.000						-.0534									
180.000						-.0527	-.0527	-.0534	-.0564	-.0542	-.0519	-.0541	-.0547	-.0547	-.0554

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0398	-.0409	-.0396	-.0402	-.0409	-.0409	-.0395	-.0403	-.0403	-.0395	-.0403	-.0403	-.0418	-.0448	-.0549
100.000	-.0415	-.0433	-.0429	-.0422	-.0422	-.0429	-.0418	-.0425	-.0425	-.0425	-.0425	-.0418	-.0418	-.0418	-.0476
110.000	-.0475	-.0475	-.0462	-.0468	-.0231	-.0462	-.0448	-.0456	-.0463	-.0471	-.0456	-.0456	-.0456	-.0463	-.0476
120.000						-.0554								-.0456	
130.000						-.0546								-.0463	
140.000						-.0501								-.0478	
150.000						-.0440								-.0425	
160.000						-.0448								-.0380	
170.000						-.0509								-.0584	
180.000	-.0560	-.0567	-.0580	-.0587	-.0587	-.0592	-.0577	-.0615	-.0630	-.0607	-.0645	-.0637	-.0637	-.0630	-.0650

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0687		
70.000							-.0724	-.0705	-.0696
80.000							-.0742	-.0724	-.0696
90.000	-.0558	-.0595	-.0632	-.0632	-.0623	-.0650	-.0696	-.0715	-.0614
100.000	-.0478	-.0503	-.0494	-.0448	-.0485	-.0595			
110.000	-.0478	-.0487	-.0393	-.0347	-.0402	-.0361			
120.000						.0921			
130.000						.0131			
140.000						-.0081			
150.000						.0323			
160.000						-.0219			
170.000						-.0108			
180.000	-.0650	-.0650	-.0620	-.0577	-.0513	.0544			

OA64 ORBITER ENTRY CONFIGURATION (RQ4002)

MACH (4) = 4.500 ALPHA (5) = 16.010 RN/L = 3.5000 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0847	.0508	.0445												
70.000	.0820	.0536	.0385												
80.000	.0478	.0430	.0355												
90.000			.0415	.0196	-.0168	-.0274	-.0304	-.0312	-.0334	-.0357	-.0372	-.0380	-.0394	-.0400	-.0394
100.000						-.0274	-.0304	-.0319	-.0342	-.0372	-.0387	-.0395	-.0400	-.0407	-.0427
110.000						-.0274	-.0312	-.0342	-.0380	-.0418	-.0433	-.0434	-.0453	-.0453	-.0460
120.000						-.0297								-.0633	
130.000						-.0403								-.0579	
140.000						-.0569								-.0566	
150.000						-.0569								-.0540	
160.000						-.0592								-.0533	
170.000						-.0592								-.0553	
180.000						-.0592	-.0592	-.0592	-.0592	-.0592	-.0592	-.0593	-.0599	-.0599	-.0606

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0394	-.0400	-.0394	-.0394	-.0387	-.0380	-.0377	-.0377	-.0400	-.0430	-.0446	-.0476	-.0553	-.0598	-.0632
100.000	-.0427	-.0420	-.0427	-.0427	-.0427	-.0427	-.0415	-.0415	-.0423	-.0407	-.0400	-.0415	-.0400	-.0453	-.0477
110.000	-.0460	-.0467	-.0460	-.0453	-.0228	-.0467	-.0461	-.0453	-.0461	-.0461	-.0461	-.0453	-.0446	-.0438	-.0441
120.000						-.0586								-.0499	
130.000						-.0583								-.0507	
140.000						-.0583								-.0522	
150.000						-.0514								-.0514	
160.000						-.0491								-.0453	
170.000						-.0560								-.0621	
180.000	-.0819	-.0633	-.0633	-.0626	-.0626	-.0652	-.0660	-.0660	-.0690	-.0705	-.0667	-.0675	-.0675	-.0675	-.0642

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0669		
70.000							-.0696	-.0687	-.0678
80.000							-.0724	-.0687	-.0678
90.000	-.0823	-.0869	-.0678	-.0869	-.0678	-.0687	-.0715	-.0696	-.0669
100.000	-.0493	-.0550	-.0559	-.0532	-.0368	-.0623			
110.000	-.0450	-.0486	-.0441	-.0349	-.0441	-.0322			
120.000						.1012			
130.000						.0345			
140.000						.0044			
150.000						.0144			
160.000						-.0285			
170.000						-.0230			
180.000	-.0998	-.0844	-.0805	-.0541	-.0441	.0437			

OA64 ORBITER ENTRY CONFIGURATION (R04002)

MACH (4) = 4.500 ALPHA (6) = 18.010 RN/L = 3.5000 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0827	.0397	.0485												
70.000	.0540	.0518	.0397												
80.000	.0367	.0359	.0321												
90.000			.0306	.0117	-.0185	-.0290	-.0313	-.0328	-.0336	-.0351	-.0358	-.0381	-.0399	-.0393	-.0399
100.000						-.0305	-.0320	-.0336	-.0351	-.0366	-.0373	-.0381	-.0413	-.0426	-.0419
110.000						-.0298	-.0328	-.0358	-.0381	-.0403	-.0411	-.0439	-.0446	-.0453	-.0466
120.000						-.0320								-.0672	
130.000						-.0403								-.0679	
140.000						-.0570								-.0606	
150.000						-.0570								.0572	
160.000						-.0600								-.0539	
170.000						-.0600								-.0572	
180.000						-.0600	-.0600	-.0592	-.0592	-.0600	-.0607	-.0632	-.0639	-.0646	-.0659

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0386	-.0379	-.0373	-.0366	-.0353	-.0346	-.0324	-.0354	-.0431	-.0560	-.0644	-.0698	-.0713	-.0728	-.0724
100.000	-.0419	-.0419	-.0413	-.0413	-.0413	-.0406	-.0385	-.0377	-.0377	-.0369	-.0377	-.0392	-.0415	-.0438	-.0496
110.000	-.0479	-.0459	-.0439	-.0453	-.0246	-.0459	-.0446	-.0438	-.0431	-.0431	-.0431	-.0431	-.0438	-.0453	-.0451
120.000						-.0612								-.0515	
130.000						-.0599								-.0545	
140.000						-.0614								-.0553	
150.000						-.0583								-.0576	
160.000						-.0522								-.0553	
170.000						-.0591								-.0652	
180.000	-.0886	-.0872	-.0886	-.0886	-.0839	-.0683	-.0698	-.0698	-.0713	-.0713	-.0667	-.0690	-.0683	-.0667	-.0624

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0678		
70.000							-.0696	-.0687	-.0678
80.000							-.0705	-.0687	-.0669
90.000	-.0715	-.0733	-.0733	-.0715	-.0705	-.0715	-.0715	-.0678	-.0660
100.000	-.0589	-.0633	-.0678	-.0651	-.0660	-.0642			
110.000	-.0451	-.0487	-.0496	-.0423	-.0496	-.0560			
120.000						.0642			
130.000						.0442			
140.000						-.0041			
150.000						-.0032			
160.000						-.0305			
170.000						-.0268			
180.000	-.0824	-.0814	-.0596	-.0523	-.0460	-.0159			

OA84 ORBITER ENTRY CONFIGURATION (R04002)

MACH (4) = 4.500 ALPHA (7) = 19.980 RN/L = 3.5000 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0785	.0278	.0480												
70.000	.0445	.0490	.0384												
80.000	.0248	.0271	.0293												
90.000			.0172	.0036	-.0214	-.0312	-.0327	-.0355	-.0342	-.0350	-.0373	-.0380	-.0361	-.0361	-.0348
100.000						-.0342	-.0357	-.0365	-.0365	-.0380	-.0388	-.0395	-.0401	-.0408	-.0395
110.000						-.0357	-.0380	-.0395	-.0403	-.0426	-.0426	-.0421	-.0434	-.0428	-.0461
120.000						-.0373								-.0666	
130.000						-.0448								-.0672	
140.000						-.0607								-.0639	
150.000						-.0615								-.0580	
160.000						-.0607								-.0527	
170.000						-.0622								-.0573	
180.000						-.0630	-.0622	-.0615	-.0622	-.0630	-.0645	-.0639	-.0646	-.0659	-.0672

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0328	-.0309	-.0295	-.0242	-.0229	-.0441	-.0599	-.0683	-.0728	-.0744	-.0744	-.0713	-.0744	-.0744	-.0798
100.000	-.0388	-.0388	-.0375	-.0361	-.0361	-.0355	-.0331	-.0301	-.0285	-.0354	-.0515	-.0621	-.0690	-.0713	-.0770
110.000	-.0441	-.0441	-.0428	-.0428	-.0229	-.0414	-.0408	-.0392	-.0400	-.0392	-.0385	-.0369	-.0377	-.0408	-.0512
120.000						-.0606								-.0522	
130.000						-.0614								-.0568	
140.000						-.0621								-.0576	
150.000						-.0621								-.0591	
160.000						-.0583								-.0606	
170.000						-.0614								-.0652	
180.000	-.0872	-.0872	-.0866	-.0646	-.0859	-.0698	-.0713	-.0713	-.0728	-.0713	-.0698	-.0683	-.0667	-.0667	-.0678

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
80.000							-.0705		
70.000							-.0724	-.0705	-.0687
80.000							-.0733	-.0696	-.0687
90.000	-.0779	-.0798	-.0789	-.0761	-.0752	-.0742	-.0724	-.0696	-.0696
100.000	-.0770	-.0789	-.0789	-.0761	-.0770	-.0669			
110.000	-.0804	-.0669	-.0705	-.0687	-.0742	-.0752			
120.000						.0255			
130.000						.0310			
140.000						-.0188			
150.000						-.0133			
160.000						-.0355			
170.000						-.0272			
180.000	-.0689	-.0659	-.0622	-.0585	-.0567	-.0272			

OA64 ORBITER ENTRY CONFIGURATION (RQ4002)

MACH (4) = 4.500 ALPHA (8) = 20.980 RN/L = 3.5000 BETA = 4.0500

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.0789	.0191	.0450												
70.000	.0404	.0480	.0382												
80.000	.0191	.0229	.0283												
90.000			.0108	.0017	-.0227	-.0325	-.0341	-.0341	-.0348	-.0356	-.0379	-.0379	-.0396	-.0389	-.0375
100.000						-.0363	-.0379	-.0379	-.0379	-.0386	-.0394	-.0401	-.0443	-.0443	-.0429
110.000						-.0401	-.0409	-.0417	-.0424	-.0432	-.0439	-.0476	-.0476	-.0483	-.0490
120.000						-.0409								-.0726	
130.000						-.0515								-.0726	
140.000						-.0614								-.0726	
150.000						-.0645								-.0638	
160.000						-.0645								-.0584	
170.000						-.0645								-.0645	
180.000						-.0645	-.0645	-.0637	-.0645	-.0660	-.0675	-.0712	-.0719	-.0726	-.0739

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0342	-.0315	-.0254	-.0247	-.0517	-.0719	-.0776	-.0799	-.0807	-.0799	-.0799	-.0799	-.0807	-.0799	-.0817
100.000	-.0423	-.0409	-.0396	-.0382	-.0375	-.0369	-.0331	-.0316	-.0425	-.0612	-.0721	-.0760	-.0799	-.0799	-.0789
110.000	-.0478	-.0476	-.0470	-.0456	-.0308	-.0443	-.0433	-.0433	-.0440	-.0425	-.0417	-.0425	-.0472	-.0542	-.0622
120.000						-.0652								-.0588	
130.000						-.0682								-.0635	
140.000						-.0682								-.0651	
150.000						-.0698								-.0668	
160.000						-.0659								-.0682	
170.000						-.0690								-.0713	
180.000	-.0739	-.0728	-.0719	-.0719	-.0732	-.0776	-.0778	-.0791	-.0783	-.0744	-.0744	-.0729	-.0729	-.0721	-.0678

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0705		
70.000							-.0724	-.0705	-.0705
80.000							-.0724	-.0715	-.0705
90.000	-.0752	-.0780	-.0761	-.0743	-.0743	-.0733	-.0724	-.0715	-.0715
100.000	-.0770	-.0780	-.0780	-.0743	-.0743	-.0715			
110.000	-.0705	-.0743	-.0752	-.0733	-.0752	-.0715			
120.000						-.0288			
130.000						.0223			
140.000						-.0260			
150.000						-.0204			
160.000						-.0418			
170.000						-.0316			
180.000	-.0887	-.0859	-.0831	-.0813	-.0794	-.0343			

OA84 ORBITER ENTRY CONFIGURATION (RQ4003) (05 JAN 74)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 IN.
LREF = .0000 IN. YMRP = .0000 IN.
BREF = .0000 IN. ZMRP = .0000 IN.
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = 2.000 ELEVON = -15.000

MACH (1) = 2.500 ALPHA (1) = 7.990 RN/L = 2.5022 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1431	.1373	.0746												
70.000	.1417	.1098	.0804												
80.000	.1446	.1183	.0921												
90.000			.1096	.0498	-.0287	-.0501	-.0501	-.0455	-.0440	-.0425	-.0409	-.0409	-.0423	-.0439	-.0490
100.000						-.0425	-.0409	-.0409	-.0440	-.0470	-.0486	-.0516	-.0541	-.0541	-.0575
110.000						-.0455	-.0516	-.0531	-.0562	-.0669	-.0699	-.0710	-.0727	-.0761	-.0761
120.000						-.0303								-.1134	
130.000						-.0776								-.1049	
140.000						-.1325								-.0981	
150.000						-.1309								-.0931	
160.000						-.1248								-.0880	
170.000						-.1218								-.0880	
180.000						-.1218	-.1172	-.1142	-.1081	-.0989	-.0913	-.0880	-.0846	-.0880	-.0778

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0490	-.0541	-.0541	-.0592	-.0575	-.0592	-.0630	-.0646	-.0677	-.0677	-.0693	-.0646	-.0614	-.0568	-.0578
100.000	-.0592	-.0609	-.0626	-.0592	-.0660	-.0677	-.0708	-.0724	-.0739	-.0693	-.0693	-.0708	-.0614	-.0568	-.0515
110.000	-.0778	-.0778	-.0778	-.0778	-.0694	-.0795	-.0771	-.0786	-.0771	-.0771	-.0739	-.0677	-.0630	-.0599	-.0531
120.000						-.0778								-.0568	
130.000						-.0599								-.0489	
140.000						-.0489								-.0349	
150.000						-.0474								-.0302	
160.000						-.0474								-.0271	
170.000						-.0489								-.0255	
180.000	-.0795	-.0778	-.0694	-.0643	-.0592	-.0536	-.0489	-.0458	-.0396	-.0380	-.0333	-.0318	-.0365	-.0255	-.0325

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1163		
70.000							-.0847	-.0815	-.0831
80.000							-.0499	-.0673	-.0847
90.000	-.0857	-.0815	-.0863	-.0910	-.0942	-.0389	-.0373	-.0515	-.0736
100.000	-.0915	-.0857	-.0705	-.0736	-.0310	-.0752			
110.000	-.0492	-.0515	-.0531	-.0009	.0481	.0291			
120.000						.1672			

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (1) = 2.500 ALPHA (1) = 7.990

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
130.000						.1715			
140.000						.1485			
150.000						.1715			
160.000						.2117			
170.000						.2389			
180.000	-.0231	-.0262	-.0278	-.0120	.1241	.2274			

MACH (1) = 2.500 ALPHA (2) = 10.000 RN/L = 2.5022 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1411	.1193	.0772												
70.000	.1295	.1077	.0801												
80.000	.1251	.1092	.0873												
90.000			.1033	.0437	-.0296	-.0496	-.0512	-.0466	-.0435	-.0419	-.0404	-.0419	-.0421	-.0439	-.0490
100.000						-.0404	-.0388	-.0358	-.0373	-.0404	-.0435	-.0466	-.0490	-.0542	-.0559
110.000						-.0404	-.0435	-.0450	-.0512	-.0604	-.0682	-.0715	-.0732	-.0767	-.0767
120.000						-.0281								-.1267	
130.000						-.0836								-.1164	
140.000						-.1407								-.1043	
150.000						-.1407								-.0974	
160.000						-.1329								-.0922	
170.000						-.1299								-.0922	
180.000						-.1299	-.1268	-.1221	-.1160	-.1067	-.0990	-.0956	-.0905	-.0922	-.0853

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0525	-.0559	-.0577	-.0594	-.0577	-.0577	-.0620	-.0666	-.0651	-.0712	-.0697	-.0697	-.0620	-.0620	-.0690
100.000	-.0611	-.0628	-.0663	-.0715	-.0715	-.0715	-.0682	-.0712	-.0743	-.0712	-.0774	-.0774	-.0743	-.0712	-.0706
110.000	-.0787	-.0787	-.0784	-.0836	-.0715	-.0939	-.0898	-.0867	-.0867	-.0882	-.0867	-.0851	-.0820	-.0774	-.0722
120.000						-.1129								-.0635	
130.000						-.0651								-.0728	
140.000						-.0543								-.0466	
150.000						-.0496								-.0373	
160.000						-.0466								-.0311	
170.000						-.0450								-.0311	
180.000	-.0818	-.0787	-.0897	-.0646	-.0577	-.0496	-.0466	-.0435	-.0419	-.0404	-.0373	-.0373	-.0358	-.0311	-.0374

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									

OA64 ORBITER ENTRY CONFIGURATION (R04003)

MACH (1) = 2.500 ALPHA (2) = 10.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1417		
70.000							-.1132	-.1101	-.1227
80.000							-.0769	-.0880	-.1069
90.000	-.0737	-.0943	-.1022	-.1069	-.1101	-.0611	-.0579	-.0722	-.0895
100.000	-.0858	-.0801	-.0880	-.0895	-.0548	-.0627			
110.000	-.0627	-.0643	-.0674	-.0153	.0289	.0179			
120.000						.1631			
130.000						.1516			
140.000						.0911			
150.000						.1588			
160.000						.2222			
170.000						.2481			
180.000	-.0248	-.0342	-.0374	-.0342	.0523	.3158			

MACH (1) = 2.500 ALPHA (3) = 12.000 RN/L = 2.5022 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1341	.1050	.0758												
70.000	.1152	.1021	.0758												
80.000	.1090	.0977	.0817												
90.000			.0948	.0452	-.0296	-.0496	-.0496	-.0466	-.0450	-.0435	-.0435	-.0450	-.0473	-.0490	-.0542
100.000						-.0512	-.0512	-.0481	-.0481	-.0481	-.0481	-.0481	-.0525	-.0542	-.0611
110.000						-.0358	-.0404	-.0435	-.0496	-.0604	-.0635	-.0646	-.0663	-.0680	-.0749
120.000						-.0296								-.1440	
130.000						-.0867								-.1319	
140.000						-.1468								-.1112	
150.000						-.1484								-.1008	
160.000						-.1406								-.0956	
170.000						-.1376								-.0956	
180.000						-.1376	-.1345	-.1298	-.1237	-.1129	-.1052	-.1008	-.0956	-.0956	-.0887

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0559	-.0994	-.0977	-.0811	-.0811	-.0628	-.0662	-.0678	-.0725	-.0725	-.0756	-.0756	-.0725	-.0709	-.0722
100.000	-.0848	-.0863	-.0880	-.0880	-.0880	-.0715	-.0709	-.0756	-.0772	-.0803	-.0803	-.0803	-.0787	-.0772	-.0769
110.000	-.0870	-.0887	-.0887	-.0887	-.0680	-.0887	-.0881	-.0896	-.0912	-.0928	-.0943	-.0928	-.0912	-.0896	-.0864
120.000						-.1250								-.0834	
130.000						-.1146								-.0943	
140.000						-.0725								-.0693	
150.000						-.0584								-.0475	

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1083) (RQ4003)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (3) = 12.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI														-.0381	
180.000						-.0491								-.0381	
170.000						-.0475									
180.000	-.0836	-.0788	-.0715	-.0663	-.0628	-.0553	-.0522	-.0475	-.0459	-.0444	-.0444	-.0444	-.0459	-.0444	-.0500

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.1685		
80.000							-.1480	-.1433	-.1496
70.000							-.1038	-.1117	-.1275
80.000						-.0911	-.0753	-.0895	-.1053
90.000	-.0789	-.0974	-.1085	-.1164	-.1227	-.0848			
100.000	-.0722	-.0880	-.0943	-.1038	-.0895	.0084			
110.000	-.0753	-.0832	-.0864	-.0548	.0132	.1516			
120.000						.1199			
130.000						.0084			
140.000						.1617			
150.000						.2221			
160.000						.2423			
170.000						.3905			
180.000	-.0374	-.0437	-.0485	-.0469	-.0232				

MACH (1) = 2.500 ALPHA (4) = 14.010 RN/L = 2.5022 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1311	.0904	.0758												
70.000	.1049	.0976	.0729												
80.000	.0880	.0974	.0743												
90.000			.0831	.0394	-.0319	-.0518	-.0502	-.0487	-.0457	-.0472	-.0487	-.0502	-.0531	-.0531	-.0565
100.000						-.0487	-.0487	-.0472	-.0472	-.0472	-.0502	-.0533	-.0565	-.0531	-.0565
110.000						-.0396	-.0411	-.0472	-.0518	-.0594	-.0659	-.0667	-.0752	-.0787	-.0804
120.000						-.0335								-.1502	
130.000						-.0883								-.1383	
140.000						-.1508								-.1178	
150.000						-.1524								-.1076	
160.000						-.1447								-.0957	
170.000						-.1417								-.0957	
180.000						-.1417	-.1402	-.1341	-.1249	-.1143	-.1082	-.1042	-.0991	-.0957	-.0872

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (1) = 2.500 ALPHA (4) = 14.010

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4300	.4480	.4660	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6750	.6880	.7100
PHI															
90.000	-.0585	-.0585	-.0582	-.0599	-.0633	-.0650	-.0676	-.0706	-.0737	-.0737	-.0768	-.0814	-.0783	-.0798	-.0810
100.000	-.0618	-.0618	-.0650	-.0618	-.0633	-.0701	-.0706	-.0737	-.0737	-.0783	-.0768	-.0814	-.0783	-.0798	-.0794
110.000	-.0787	-.0804	-.0804	-.0804	-.0650	-.0838	-.0844	-.0875	-.0906	-.0921	-.0936	-.0936	-.0936	-.0921	-.0888
120.000						-.1349								-.0860	
130.000						-.1366								-.1028	
140.000						-.0936								-.1151	
150.000						-.0722								-.0691	
160.000						-.0599								-.0522	
170.000						-.0553								-.0461	
180.000	-.0838	-.0804	-.0701	-.0833	-.0818	-.0568	-.0553	-.0538	-.0522	-.0522	-.0522	-.0538	-.0553	-.0553	-.0590

X/L	.7290	.7470	.7670	.7850	.8090	.8290	.8620	.9000	.9400
PHI									
80.000							-.1799		
70.000							-.1705	-.1689	-.1579
80.000							-.1312	-.1391	-.1532
90.000	-.0888	-.1030	-.1155	-.1234	-.1281	-.1061	-.0935	-.1077	-.1218
100.000	-.0794	-.0962	-.0998	-.1077	-.0982	-.1014			
110.000	-.0810	-.0904	-.0920	-.0653	.0038	-.0040			
120.000						.1341			
130.000						.0766			
140.000						-.0700			
150.000						.1015			
160.000						.2132			
170.000						.2232			
180.000	-.0480	-.0574	-.0606	-.0637	-.0496	.3626			

MACH (1) = 2.500 ALPHA (5) = 16.000 RN/L = 2.5022 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4020	.4310
PHI															
80.000	.1285	.0774	.0789												
70.000	.0920	.0949	.0716												
80.000	.0672	.0774	.0672												
90.000			.0687	.0923	-.0341	-.0557	-.0542	-.0526	-.0526	-.0526	-.0542	-.0557	-.0582	-.0582	-.0599
100.000						-.0526	-.0511	-.0511	-.0526	-.0557	-.0573	-.0573	-.0599	-.0582	-.0599
110.000						-.0449	-.0495	-.0542	-.0603	-.0681	-.0712	-.0738	-.0738	-.0756	-.0758
120.000						-.0403								-.1695	
130.000						-.0912								-.1590	
140.000						-.1576								-.1347	
150.000						-.1607								-.1173	

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (1) = 2.900 ALPHA (5) = 16.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000						-.1529								-.0982	
90.000						-.1499								-.0964	
100.000						-.1499	-.1468	-.1406	-.1298	-.1205	-.1128	-.1086	-.1016	-.0982	-.0912
110.000															

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0599	-.0834	-.0816	-.0634	-.0686	-.0669	-.0693	-.0724	-.0771	-.0786	-.0833	-.0864	-.0896	-.0927	-.1029
100.000	-.0599	-.0816	-.0651	-.0634	-.0569	-.0721	-.0708	-.0724	-.0771	-.0786	- .0833	-.0816	-.0802	-.0849	-.0856
110.000	-.0773	-.0790	-.0790	-.0808	-.0669	-.0860	-.0864	-.0896	-.0911	-.0927	.0943	-.0943	-.0927	-.0927	-.0919
120.000						-.1538								-.0927	
130.000						-.1552								-.1146	
140.000						-.1302								-.1302	
150.000						-.0911								-.1005	
160.000						-.0677								-.0708	
170.000						-.0568								-.0646	
180.000	-.0895	-.0825	-.0738	-.0686	-.0634	-.0583	-.0568	-.0568	-.0615	-.0646	-.0677	-.0693	-.0740	-.0724	-.0809

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9007	.9400
PHI									
60.000							-.1909		
70.000							-.1877	-.1893	-.1704
80.000							-.1689	-.1689	-.1751
90.000	-.1092	-.1264	-.1374	-.1484	-.1500	-.1374	-.1312	-.1374	-.1469
100.000	-.0903	-.1060	-.1139	-.1186	-.1076	-.1296			
110.000	-.0903	-.0982	-.1029	-.0777	-.0259	-.0133			
120.000						.1303			
130.000						.0842			
140.000						-.0495			
150.000						.1837			
160.000						.1692			
170.000						.1793			
180.000	-.0899	-.0793	-.0856	-.0840	-.0683	.3639			

OA64 ORBITER ENTRY CONFIGURATION (R24003)

MACH (1) = 2.500 ALPHA (6) = 17.990 RN/L = 2.5022 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4110
PHI															
80.000	.1222	.0611	.0785												
70.000	.0771	.0873	.0883												
80.000	.0494	.0625	.0596												
90.000			.0494	.0212	-.0405	-.0605	-.0590	-.0575	-.0575	-.0575	-.0590	-.0605	-.0606	-.0606	.0623
100.000						-.0590	-.0590	-.0575	-.0590	-.0605	-.0605	-.0590	-.0606	-.0606	-.0623
110.000						-.0513	-.0559	-.0605	-.0652	-.0713	-.0729	-.0726	-.0726	-.0726	-.0726
120.000						-.0559								-.1823	
130.000						-.0960								-.1754	
140.000						-.1623								-.1412	
150.000						-.1669								-.1292	
160.000						-.1577								-.1052	
170.000						-.1561								-.0966	
180.000						-.1546	-.1530	-.1422	-.1315	-.1207	-.1145	-.1086	-.1000	-.1000	-.0966

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0623	-.0640	-.0640	-.0657	-.0657	-.0709	-.0720	-.0782	-.0813	-.0875	-.0937	-.1014	-.1092	-.1169	-.1359
100.000	-.0623	-.0623	-.0640	-.0657	-.0657	-.0709	-.0720	-.0751	-.0751	-.0782	-.0782	-.0813	-.0828	-.0890	-.0991
110.000	-.0743	-.0760	-.0777	-.0795	-.0657	-.0846	-.0859	-.0859	-.0875	-.0890	-.0890	-.0890	-.0844	-.0875	-.0927
120.000						-.1566								-.0952	
130.000						-.1619								-.1200	
140.000						-.1681								-.1278	
150.000						-.1076								-.1253	
160.000						-.0782								-.0963	
170.000						-.0626								-.0844	
180.000	-.0897	-.0829	-.0726	-.0857	-.0640	-.0626	-.0657	-.0704	-.0766	-.0797	-.0859	-.0890	-.0921	-.0968	-.1023

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
80.000							-.1998		
70.000							-.2030	-.1918	-.1758
80.000							-.2050	-.1918	-.1902
90.000	-.1471	-.1598	-.1710	-.1694	-.1710	-.1838	-.1790	-.1630	-.1726
100.000	-.1087	-.1279	-.1375	-.1231	-.1391	-.1726			
110.000	-.0943	-.1055	-.1007	-.0799	-.0879	-.0176			
120.000						.1168			
130.000						.0995			
140.000						-.0160			
150.000						.1211			
160.000						.1168			
170.000						.1312			
180.000	-.0943	-.0991	-.1039	-.1055	-.0719	.1182			

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (1) = 2.300 ALPHA (7) = 20.010 RN/L = 2.5022 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1195	.0495	.0801												
70.000	.0870	.0830	.0670												
80.000	.0335	.0466	.0539												
90.000			.0305	.0086	-.0460	-.0678	-.0647	-.0631	-.0616	-.0631	-.0647	-.0663	-.0640	-.0640	-.0657
100.000						-.0694	-.0663	-.0647	-.0647	-.0647	-.0647	-.0647	-.0657	-.0640	-.0657
110.000						-.0631	-.0663	-.0694	-.0709	-.0741	-.0741	-.0725	-.0743	-.0743	-.0743
120.000						-.0678								-.1926	
130.000						-.0990								-.1977	
140.000						-.1724								-.1411	
150.000						-.1739								-.1446	
160.000						-.1646								-.1068	
170.000						-.1615								-.0965	
180.000						-.1615	-.1568	-.1443	-.1334	-.1240	-.1178	-.1103	-.1051	-.1017	-.0985

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	6540	.6730	.6880	.7100
PHI															
90.000	-.0657	-.0657	-.0657	-.0691	-.0708	-.0760	-.0848	-.0943	-.1006	-.1101	-.1212	-.1322	-.1401	-.1512	-.1638
100.000	-.0657	-.0657	-.0657	-.0691	-.0708	-.0708	-.0722	-.0769	-.0785	-.0817	-.0864	-.0943	-.1006	-.1085	-.1212
110.000	-.0743	-.0777	-.0794	-.0794	-.0708	-.0811	-.0833	-.0864	-.0864	-.0880	-.0864	-.0880	-.0896	-.0943	-.1022
120.000						-.1431								-.1054	
130.000						-.1670								-.1306	
140.000						-.1749								-.1306	
150.000						-.1385								-.1401	
160.000						-.0927								-.1243	
170.000						-.0722								-.1085	
180.000	-.0914	-.0828	-.0743	-.0708	-.0708	-.0754	-.0833	-.0927	-.0990	-.1038	-.1101	-.1133	-.1164	-.1180	-.1180

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.2049		
70.000							-.2065	-.1954	-.1796
80.000							-.2128	-.2033	-.1859
90.000	-.1717	-.1843	-.1891	-.1891	-.1922	-.2017	-.1970	-.1875	-.1859
100.000	-.1338	-.1512	-.1607	-.1528	-.1654	-.1922			
110.000	-.1085	-.1243	-.1259	-.1133	-.1196	-.0864			
120.000						.0824			
130.000						.1025			
140.000						-.0216			
150.000						.0838			
160.000						.0838			
170.000						.1039			
180.000	-.1085	-.1133	-.1196	-.1196	-.0843	.2476			

OA64 ORBITER ENTRY CONFIGURATION (R94003)

MACH (1) = 2.500 ALPHA (8) = 20.980 RN/L = 2.5022 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1149	.0407	.0800												
70.000	.0567	.0786	.0869												
80.000	.0227	.0407	.0524												
90.000			.0195	.0024	-.0476	-.0694	-.0678	-.0647	-.0647	-.0647	-.0663	-.0678	-.0663	-.0663	-.0663
100.000						-.0725	-.0710	-.0678	-.0673	-.0663	-.0663	-.0663	-.0663	-.0663	-.0663
110.000						-.0694	-.0710	-.0741	-.0741	-.0757	-.0757	-.0750	-.0767	-.0767	-.0750
120.000						-.0757								-.1992	
130.000						-.1022								-.1992	
140.000						-.1740								-.1492	
150.000						-.1771								-.1492	
160.000						-.1677								-.1112	
170.000						-.1646								-.0991	
180.000						-.1646	-.1568	-.1443	-.1334	-.1240	-.1178	-.1112	-.1060	-.1043	-.0991

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0863	-.0863	-.0681	-.0715	-.0733	-.0853	-.0935	-.1030	-.1110	-.1269	-.1364	-.1475	-.1634	-.1682	-.1851
100.000	-.0863	-.0863	-.0681	-.0715	-.0733	-.0715	-.0744	-.0808	-.0824	-.0872	-.0951	-.1046	-.1110	-.1221	-.1353
110.000	-.0784	-.0802	-.0802	-.0802	-.0715	-.0802	-.0824	-.0808	-.0824	-.0872	-.0872	-.0935	-.0967	-.1015	-.1128
120.000						-.1526								-.1126	
130.000						-.1714								-.1332	
140.000						-.1745								-.1316	
150.000						-.1539								-.1364	
160.000						-.1078								-.1364	
170.000						-.0792								-.1173	
180.000	-.0922	-.0868	-.0836	-.0802	-.0802	-.0856	-.0935	-.1046	-.1110	-.1142	-.1205	-.1221	-.1237	-.1269	-.1321

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.2093		
70.000							-.2157	-.2061	-.1916
80.000							-.2205	-.2109	-.1964
90.000	-.1932	-.1964	-.2061	-.2012	-.2061	-.2125	-.2061	-.2012	-.1996
100.000	-.1481	-.1674	-.1771	-.1691	-.1819	-.2093			
110.000	-.1224	-.1369	-.1401	-.1268	-.1369	-.1095			
120.000						.0550			
130.000						.0794			
140.000						-.0259			
150.000						.0665			
160.000						.0665			
170.000						.0895			
180.000	-.1224	-.1240	-.1268	-.1240	-.0597	.2202			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4003)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (1) = 8.000 RN/L = 2.5132 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1488	.1169	.0792												
70.000	.1468	.1135	.0844												
80.000	.1485	.1187	.0964												
90.000			.1152	.0518	-.0202	-.0373	-.0373	-.0356	-.0356	-.0356	-.0356	-.0322	-.0347	-.0347	-.0385
100.000						-.0287	-.0287	-.0287	-.0305	-.0339	-.0356	-.0373	-.0404	-.0423	-.0385
110.000						-.0253	-.0322	-.0356	-.0373	-.0459	-.0493	-.0518	-.0537	-.0556	-.0575
120.000						-.0099								-.0861	
130.000						-.0459								-.0880	
140.000						-.0905								-.0880	
150.000						-.0939								-.0804	
160.000						-.0905								-.0727	
170.000						-.0905								-.0708	
180.000						-.0887	-.0853	-.0819	-.0802	-.0767	-.0750	-.0727	-.0689	-.0708	-.0689

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0404	-.0423	-.0423	-.0442	-.0461	-.0461	-.0430	-.0448	-.0483	-.0483	-.0483	-.0483	-.0466	-.0430	-.0508
100.000	-.0442	-.0461	-.0461	-.0442	-.0461	-.0499	-.0483	-.0518	-.0536	-.0536	-.0553	-.0553	-.0518	-.0518	-.0544
110.000	-.0575	-.0594	-.0594	-.0594	-.0461	-.0591	-.0571	-.0571	-.0588	-.0606	-.0606	-.0606	-.0518	-.0571	-.0580
120.000						-.0746								-.0536	
130.000						-.0501								-.0466	
140.000						-.0430								-.0325	
150.000						-.0430								-.0325	
160.000						-.0430								-.0290	
170.000						-.0430								-.0308	
180.000	-.0651	-.0632	-.0594	-.0594	-.0537	-.0466	-.0448	-.0395	-.0378	-.0343	-.0308	-.0325	-.0308	-.0308	-.0365

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0940		
70.000							-.0778	-.0634	-.0688
80.000							-.0418	-.0472	-.0598
90.000	-.0508	-.0618	-.0688	-.0706	-.0760	-.0472	-.0239	-.0383	-.0490
100.000	-.0490	-.0582	-.0580	-.0616	-.0472	-.0706			
110.000	-.0490	-.0508	-.0490	-.0257	.0265	.0445			
120.000						.1674			
130.000						.1481			
140.000						.1218			
150.000						.1272			
160.000						.1497			
170.000						.1786			
180.000	-.0293	-.0329	-.0329	-.0311	.0517	.2107			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1083)

(RQ4003)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (2) = 10.000 RN/L = 2.5132 BETA = 1.9900

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1404	.1256	.0779												
70.000	.1339	.1086	.0813												
80.000	.1290	.1086	.0898												
90.000			.1069	.0489	-.0193	-.0380	-.0380	-.0363	-.0346	-.0346	-.0346	-.0329	-.0376	-.0395	-.0414
100.000						-.0329	-.0329	-.0312	-.0329	-.0346	-.0363	-.0363	-.0414	-.0433	-.0414
110.000						-.0244	-.0295	-.0312	-.0363	-.0431	-.0482	-.0529	-.0549	-.0568	-.0568
120.000						-.0125								-.0970	
130.000						-.0534								-.0932	
140.000						-.0977								-.0913	
150.000						-.1011								-.0855	
160.000						-.0977								-.0798	
170.000						-.0977								-.0779	
180.000						-.0960	-.0926	-.0892	-.0875	-.0840	-.0806	-.0798	-.0798	-.0779	-.0740

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0433	-.0472	-.0472	-.0491	-.0491	-.0491	-.0479	-.0497	-.0551	-.0551	-.0569	-.0587	-.0551	-.0533	-.0540
100.000	-.0472	-.0472	-.0529	-.0549	-.0568	-.0568	-.0551	-.0551	-.0587	-.0587	-.0569	-.0587	-.0604	-.0622	-.0593
110.000	-.0568	-.0568	-.0606	-.0644	-.0549	-.0740	-.0712	-.0712	-.0694	-.0694	-.0694	-.0694	-.0694	-.0694	-.0682
120.000						-.0913								-.0676	
130.000						-.0676								-.0747	
140.000						-.0551								-.0533	
150.000						-.0497								-.0426	
160.000						-.0479								-.0390	
170.000						-.0479								-.0390	
180.000	-.0702	-.0702	-.0606	-.0606	-.0549	-.0515	-.0497	-.0479	-.0461	-.0443	-.0426	-.0443	-.0426	-.0390	-.0415

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1126		
70.000							-.0948	-.0771	-.0877
80.000							-.0628	-.0593	-.0700
90.000	-.0522	-.0648	-.0717	-.0735	-.0788	-.0682	-.0362	-.0469	-.0593
100.000	-.0540	-.0593	-.0628	-.0682	-.0611	-.0682			
110.000	-.0628	-.0628	-.0593	-.0580	.0118	.0385			
120.000						.1628			
130.000						.1220			
140.000						.0545			
150.000						.1167			
160.000						.1547			
170.000						.1789			
180.000	-.0544	-.0580	-.0397	-.0580	-.0024	.2723			

OA84 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (2) = 2.950 ALPHA (3) = 12.000 RN/L = 2.5132 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0070	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1403	.1134	.0769												
70.000	.1220	.1030	.0769												
80.000	.1082	.0978	.0821												
90.000			.0978	.0457	-.0185	-.0375	-.0410	-.0393	-.0393	-.0375	-.0393	-.0393	-.0415	-.0434	-.0472
100.000						-.0393	-.0410	-.0410	-.0393	-.0410	-.0410	-.0410	-.0453	-.0434	-.0472
110.000						-.0271	-.0323	-.0341	-.0393	-.0445	-.0479	-.0510	-.0549	-.0568	-.0625
120.000						-.0167								-.1066	
130.000						-.0601								-.1028	
140.000						-.1069								-.0990	
150.000						-.1104								-.0913	
160.000						-.1069								-.0836	
170.000						-.1052								-.0817	
180.000						-.1052	-.1017	-.0982	-.0965	-.0930	-.0896	-.0875	-.0817	-.0817	-.0760

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0472	-.0491	-.0472	-.0491	-.0491	-.0510	-.0542	-.0525	-.0507	-.0595	-.0595	-.0595	-.0595	-.0595	-.0611
100.000	-.0530	-.0549	-.0330	-.0491	-.0530	-.0549	-.0560	-.0595	-.0595	-.0612	-.0612	-.0595	-.0630	-.0630	-.0629
110.000	-.0883	-.0702	-.0702	-.0664	-.0549	-.0664	-.0664	-.0692	-.0682	-.0699	-.0717	-.0734	-.0734	-.0734	-.0735
120.000						-.0990								-.0787	
130.000						-.1048								-.0856	
140.000						-.0734								-.0804	
150.000						-.0595								-.0560	
160.000						-.0507								-.0455	
170.000						-.0507								-.0438	
180.000	-.0721	-.0702	-.0702	-.0606	-.0606	-.0560	-.0525	-.0507	-.0490	-.0472	-.0472	-.0472	-.0490	-.0438	-.0522

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1286		
70.000							-.1162	-.1162	-.1109
80.000							-.0860	-.0806	-.0842
90.000	-.0593	-.0700	-.0753	-.0606	-.0860	-.0735	-.0575	-.0558	-.0664
100.000	-.0575	-.0700	-.0703	-.0735	-.0682	-.0735			
110.000	-.0682	-.0700	-.0700	-.0504	-.0078	.0349			
120.000						.1498			
130.000						.0917			
140.000						-.0185			
150.000						.1201			
160.000						.1482			
170.000						.1627			
180.000	-.0451	-.0487	-.0522	-.0504	-.0291	.2659			

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (2) = 2.950 ALPHA (4) = 15.980 RN/L = 2.5132 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1340	.0974	.0802												
70.000	.1094	.0991	.0750												
80.000	.0905	.0888	.0767												
90.000			.0871	.0458	-.0196	-.0385	-.0403	-.0385	-.0385	-.0403	-.0403	-.0420	-.0463	-.0463	-.0463
100.000						-.0351	-.0385	-.0385	-.0403	-.0420	-.0437	-.0471	-.0501	-.0463	-.0463
110.000						-.0317	-.0351	-.0403	-.0437	-.0506	-.0523	-.0596	-.0615	-.0634	-.0615
120.000						-.0231								-.1109	
130.000						-.0626								-.1052	
140.000						-.1091								-.0976	
150.000						-.1125								-.0976	
160.000						-.1091								-.0824	
170.000						-.1074								-.0824	
180.000						-.1074	-.1039	-.1005	-.0988	-.0936	-.0919	-.0881	-.0843	-.0824	-.0748

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0482	-.0501	-.0501	-.0501	-.0501	-.0520	-.0579	-.0527	-.0597	-.0597	-.0597	-.0614	-.0597	-.0562	-.0632
100.000	-.0482	-.0501	-.0501	-.0501	-.0501	-.0520	-.0579	-.0545	-.0597	-.0597	-.0597	-.0614	-.0614	-.0614	-.0614
110.000	-.0615	-.0615	-.0615	-.0615	-.0501	-.0634	-.0649	-.0666	-.0684	-.0701	-.0719	-.0719	-.0719	-.0719	-.0701
120.000						-.1071								-.0823	
130.000						-.1119								-.0928	
140.000						-.0823								-.1015	
150.000						-.0719								-.0719	
160.000						-.0597								-.0545	
170.000						-.0579								-.0510	
180.000	-.0710	-.0691	-.0653	-.0615	-.0596	-.0579	-.0545	-.0510	-.0492	-.0492	-.0510	-.0527	-.0562	-.0510	-.0579

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1328		
70.000							-.1311	-.1258	-.1137
80.000							-.1084	-.1084	-.1084
90.000	-.0849	-.0753	-.0825	-.0858	-.0806	-.0806	-.0806	-.0753	-.0736
100.000	-.0579	-.0849	-.0701	-.0849	-.0597	-.0771			
110.000	-.0849	-.0849	-.0832	-.0405	-.0283	.0187			
120.000						.1506			
130.000						.0849			
140.000						-.0301			
150.000						.1379			
160.000						.1110			
170.000						.1162			
180.000	-.0492	-.0362	-.0814	-.0397	-.0423	.2328			

OA64 ORBITER ENTRY CONFIGURATION (R04003)

MACH (2) = 2.950 ALPHA (3) = 15.990 RN/L = 2.5132 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1350	.0734	.0789												
70.000	.0992	.0937	.0716												
80.000	.0734	.0752	.0679												
90.000			.0697	.0511	-.0297	-.0518	-.0537	-.0537	-.0537	-.0555	-.0555	-.0555	-.0571	-.0571	-.0591
100.000						-.0518	-.0518	-.0537	-.0537	-.0573	-.0592	-.0592	-.0591	-.0571	-.0611
110.000						-.0426	-.0481	-.0537	-.0610	-.0666	-.0684	-.0692	-.0712	-.0712	-.0712
120.000						-.0426								-.1399	
130.000						-.0739								-.1318	
140.000						-.1292								-.1177	
150.000						-.1310								-.1136	
160.000						-.1273								-.0955	
170.000						-.1255								-.0914	
180.000						-.1255	-.1218	-.1200	-.1163	-.1126	-.1071	-.1015	-.0955	-.0934	-.0874

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0591	-.0611	-.0611	-.0611	-.0631	-.0631	-.0660	-.0623	-.0623	-.0641	-.0714	-.0714	-.0750	-.0769	-.0863
100.000	-.0591	-.0611	-.0591	-.0611	-.0611	-.0631	-.0660	-.0623	-.0678	-.0678	-.0714	-.0696	-.0596	-.0714	-.0733
110.000	-.0712	-.0712	-.0712	-.0712	-.0611	-.0732	-.0732	-.0769	-.0769	-.0787	-.0787	-.0787	-.0769	-.0787	-.0789
120.000						-.1318								-.0932	
130.000						-.1296								-.1096	
140.000						-.1260								-.1096	
150.000						-.0951								-.1060	
160.000						-.0750								-.0787	
170.000						-.0660								-.0696	
180.000	-.0854	-.0813	-.0793	-.0752	-.0712	-.0660	-.0641	-.0623	-.0623	-.0660	-.0714	-.0769	-.0769	-.0805	-.0826

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1493		
70.000							-.1549	-.1429	-.1364
80.000							-.1493	-.1493	-.1401
90.000	-.0919	-.1049	-.1123	-.1123	-.1123	-.1215	-.1271	-.1197	-.1160
100.000	-.0715	-.0845	-.0900	-.0713	-.0789	-.1178			
110.000	-.0715	-.0808	-.0715	-.0511	-.0567	-.0085			
120.000						.1526			
130.000						.0953			
140.000						-.0196			
150.000						.0897			
160.000						.0657			
170.000						.0712			
180.000	-.0771	-.0789	-.0845	-.0863	-.0567	.2170			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4003)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (6) = 18.000 RN/L = 2.5132 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1285	.0541	.0814												
70.000	.0832	.0887	.0705												
80.000	.0541	.0832	.0632												
90.000			.0523	.0214	-.0314	-.0514	-.0532	-.0532	-.0532	-.0550	-.0550	-.0550	-.0578	-.0578	-.0578
100.000						-.0532	-.0532	-.0532	-.0550	-.0568	-.0568	-.0568	-.0578	-.0578	-.0578
110.000						-.0478	-.0532	-.0568	-.0587	-.0641	-.0659	-.0658	-.0658	-.0658	-.0678
120.000						-.0478								-.1481	
130.000						-.0750								-.1461	
140.000						-.1296								-.1220	
150.000						-.1332								-.1180	
160.000						-.1279								-.0979	
170.000						-.1260								-.0899	
180.000						-.1260	-.1223	-.1187	-.1150	-.1114	-.1060	-.0999	-.0939	-.0919	-.0899

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0598	-.0598	-.0598	-.0598	-.0618	-.0618	-.0678	-.0696	-.0696	-.0789	-.0826	-.0900	-.0956	-.0974	-.1107
100.000	-.0598	-.0598	-.0598	-.0598	-.0618	-.0618	-.0659	-.0696	-.0696	-.0678	-.0696	-.0715	-.0733	-.0770	-.0794
110.000	-.0698	-.0678	-.0658	-.0678	-.0598	-.0718	-.0752	-.0696	-.0752	-.0770	-.0770	-.0770	-.0733	-.0789	-.0776
120.000						-.1341								-.0974	
130.000						-.1401								-.1197	
140.000						-.1438								-.1197	
150.000						-.1160								-.1252	
160.000						-.0882								-.1048	
170.000						-.0715								-.0919	
180.000	-.0899	-.0859	-.0799	-.0738	-.0698	-.0696	-.0696	-.0696	-.0807	-.0863	-.0900	-.0956	-.0974	-.1011	-.1015

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1513		
70.000							-.1549	-.1457	-.1402
80.000							-.1586	-.1549	-.1439
90.000	-.1183	-.1255	-.1347	-.1347	-.1292	-.1384	-.1457	-.1218	-.1347
100.000	-.0850	-.0979	-.1052	-.0979	-.1052	-.1347			
110.000	-.0739	-.0868	-.0850	-.0610	-.0739	-.0168			
120.000						.1478			
130.000						.0900			
140.000						-.0168			
150.000						.0587			
160.000						.0274			
170.000						.0440			
180.000	-.0923	-.0923	-.0979	-.0960	-.0629	.1848			

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (2) = 2.950 ALPHA (7) = 20.000 RN/L = 2.5132 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1214	.0395	.0813												
70.000	.0891	.0831	.0674												
80.000	.0361	.0483	.0552												
90.000			.0326	.0117	-.0336	-.0527	-.0527	-.0527	-.0527	-.0527	-.0527	-.0492	-.0568	-.0549	-.0568
100.000						-.0562	-.0562	-.0545	-.0545	-.0545	-.0510	-.0492	-.0568	-.0549	-.0568
110.000						-.0580	-.0580	-.0597	-.0614	-.0632	-.0597	-.0646	-.0646	-.0666	-.0627
120.000						-.0580								-.1485	
130.000						-.0806								-.1485	
140.000						-.1259								-.1388	
150.000						-.1328								-.1154	
160.000						-.1276								-.0978	
170.000						-.1241								-.0861	
180.000						-.1241	-.1189	-.1154	-.1102	-.1050	-.0963	-.0959	-.0920	-.0920	-.0881

X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0568	-.0568	-.0549	-.0568	-.0568	-.0607	-.0643	-.0714	-.0768	-.0839	-.0928	-.0999	-.1053	-.1142	-.1280
100.000	-.0568	-.0568	-.0588	-.0568	-.0568	-.0588	-.0571	-.0571	-.0607	-.0625	-.0660	-.0714	-.0750	-.0803	-.0883
110.000	-.0648	-.0666	-.0666	-.0666	-.0568	-.0666	-.0625	-.0625	-.0643	-.0625	-.0643	-.0696	-.0678	-.0714	-.0775
120.000						-.1271								-.0928	
130.000						-.1285								-.1106	
140.000						-.1303								-.1106	
150.000						-.1249								-.1106	
160.000						-.0928								-.1160	
170.000						-.0714								-.1071	
180.000	-.0881	-.0841	-.0802	-.0763	-.0724	-.0714	-.0785	-.0839	-.0910	-.0946	-.0999	-.1053	-.1106	-.1106	-.1082

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1515		
70.000							-.1533	-.1551	-.1389
80.000							-.1551	-.1497	-.1479
90.000	-.1335	-.1425	-.1443	-.1461	-.1425	-.1515	-.1551	-.1407	-.1443
100.000	-.0955	-.1136	-.1208	-.1136	-.1208	-.1497			
110.000	-.0793	-.0919	-.0955	-.0793	-.0901	-.0540			
120.000						.0977			
130.000						.0796			
140.000						-.0107			
150.000						.0327			
160.000						.0092			
170.000						.0273			
180.000	-.0955	-.0919	-.1028	-.0865	-.0648	.1282			

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (2) = 2.950 ALPHA (8) = 20.960 RN/L = 2.5132 BETA = 1.9900

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1250	.0292	.0856												
70.000	.0649	.0856	.0705												
80.000	.0292	.0442	.0574												
90.000			.0217	.0067	-.0384	-.0590	-.0609	-.0590	-.0590	-.0590	-.0629	-.0628	-.0611	-.0611	-.0511
100.000						-.0646	-.0665	-.0628	-.0628	-.0628	-.0628	-.0646	-.0631	-.0651	-.0611
110.000						-.0684	-.0703	-.0703	-.0722	-.0722	-.0722	-.0732	-.0732	-.0732	-.0712
120.000						-.0722								-.1601	
130.000						-.0984								-.1601	
140.000						-.1379								-.1601	
150.000						-.1473								-.1258	
160.000						-.1416								-.1076	
170.000						-.1379								-.0954	
180.000						-.1379	-.1341	-.1285	-.1229	-.1172	-.1116	-.1035	-.1015	-.0995	-.0954

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0631	-.0611	-.0591	-.0631	-.0631	-.0732	-.0802	-.0858	-.0895	-.1026	-.1119	-.1250	-.1324	-.1418	-.1528
100.000	-.0631	-.0651	-.0651	-.0631	-.0631	-.0631	-.0634	-.0672	-.0690	-.0709	-.0783	-.0839	-.0877	-.0989	-.1075
110.000	-.0712	-.0732	-.0732	-.0732	-.0631	-.0732	-.0727	-.0653	-.0690	-.0709	-.0727	-.0765	-.0802	-.0839	-.0905
120.000						-.1359								-.1082	
130.000						-.1380								-.1175	
140.000						-.1399								-.1250	
150.000						-.1436								-.1268	
160.000						-.1101								-.1250	
170.000						-.0858								-.1231	
180.000	-.0934	-.0934	-.0914	-.0853	-.0833	-.0895	-.0970	-.1026	-.1082	-.1157	-.1175	-.1250	-.1231	-.1250	-.1245

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1604		
70.000							-.1698	-.1660	-.1547
80.000							-.1698	-.1660	-.1623
90.000	-.1588	-.1604	-.1623	-.1660	-.1660	-.1698	-.1717	-.1623	-.1604
100.000	-.1188	-.1339	-.1415	-.1358	-.1434	-.1698			
110.000	-.0981	-.1094	-.1112	-.0999	-.1094	-.0829			
120.000						.0815			
130.000						.0626			
140.000						-.0205			
150.000						.0191			
160.000						.0002			
170.000						.0135			
180.000	-.1150	-.1094	-.1131	-.0923	-.0753	.1004			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (3) = 4.000 ALPHA (1) = 7.980 RN/L = 3.5010 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1659	.2078	.0970												
70.000	.1640	.1252	.0970												
80.000	.1582	.1281	.1009												
90.000			.1184	.0767	.0146	-.0029	-.0087	-.0117	-.0117	-.0117	-.0117	-.0136	-.0146	-.0157	-.0187
100.000						-.0029	-.0078	-.0117	-.0136	-.0146	-.0146	-.0165	-.0178	-.0189	-.0189
110.000						.0000	-.0068	-.0078	-.0097	-.0155	-.0184	-.0200	-.0232	-.0243	-.0243
120.000						.0213								-.0492	
130.000						-.0029								-.0536	
140.000						-.0417								-.0525	
150.000						-.0476								-.0514	
160.000						-.0476								-.0492	
170.000						-.0466								-.047	
180.000						-.0476	-.0476	-.0476	-.047	-.0456	-.0456	-.0460	-.0460	-.0460	-.0460

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0178	-.0189	-.0189	-.0200	-.0221	-.0232	-.0262	-.0262	-.0272	-.0272	-.0282	-.0292	-.0332	-.0292	-.0272
100.000	-.0200	-.0211	-.0221	-.0232	-.0243	-.0254	-.0292	-.0272	-.0322	-.0332	-.0332	-.0282	-.0332	-.0332	-.0293
110.000	-.0254	-.0254	-.0254	-.0265	.0840	-.0297	-.0352	-.0372	-.0342	-.0392	-.0402	-.0412	-.0412	-.0402	-.0375
120.000						-.0536								-.0532	
130.000						-.0532								-.0532	
140.000						-.0482								-.0442	
150.000						-.0432								-.0382	
160.000						-.0412								-.0342	
170.000						-.0422								-.0312	
180.000	-.0449	-.0438	-.0427	-.0416	-.0406	-.0432	-.0412	-.0432	-.0392	-.0392	-.0342	-.0332	-.0312	-.0312	-.0272

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0551		
70.000							-.0386	-.0344	-.0334
80.000							-.0272	-.0210	-.0168
90.000	-.0241	-.0293	-.0313	-.0334	-.0355	-.0303	-.0127	-.0034	-.0055
100.000	-.0282	-.0303	-.0303	-.0303	-.0272	.1663			
110.000	-.0355	-.0375	-.0355	-.0262	-.0127	.0587			
120.000						.1746			
130.000						.1622			
140.000						.0173			
150.000						.0204			
160.000						.0722			
170.000						.0659			
180.000	-.0220	-.0241	-.0241	-.0251	.0049	.1674			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4003)

OA64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (2) = 10.010 RN/L = 3.5010 BETA = .0000

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2920	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1613	.1373	.0949												
70.000	.1514	.1236	.0939												
80.000	.1385	.1197	.0939												
90.000			.1038	.0672	.0107	-.0081	-.0120	-.0140	-.0150	-.0170	-.0180	-.0190	-.0225	-.0246	-.0257
100.000						-.0091	-.0120	-.0140	-.0160	-.0180	-.0200	-.0210	-.0246	-.0257	-.0278
110.000						-.0051	-.0101	-.0130	-.0150	-.0210	-.0239	-.0257	-.0289	-.0300	-.0332
120.000						.0097								-.0591	
130.000						-.0150								-.0613	
140.000						-.0517								-.0613	
150.000						-.0566								-.0613	
160.000						-.0566								-.0591	
170.000						-.0556								-.0569	
180.000						-.0566	-.0556	-.0556	-.0556	-.0556	-.0556	-.0569	-.0569	-.0569	-.0548

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0288	-.0278	-.0278	-.0289	-.0278	-.0278	-.0318	-.0318	-.0338	-.0348	-.0369	-.0359	-.0359	-.0359	-.0290
100.000	-.0300	-.0311	-.0322	-.0332	-.0332	-.0332	-.0359	-.0318	-.0359	-.0359	-.0369	-.0359	-.0379	-.0399	-.0330
110.000	-.0354	-.0375	-.0386	-.0408	-.0106	-.0419	-.0439	-.0439	-.0419	-.0419	-.0369	-.0399	-.0439	-.0449	-.0401
120.000						-.0666								-.0601	
130.000						-.0671								-.0590	
140.000						-.0611								-.0590	
150.000						-.0540								-.0530	
160.000						-.0490								-.0459	
170.000						-.0480								-.0429	
180.000	-.0537	-.0526	-.0516	-.0494	-.0472	-.0490	-.0459	-.0429	-.0419	-.0399	-.0389	-.0399	-.0409	-.0419	-.0371

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0672		
70.000							-.0511	-.0481	-.0491
80.000							-.0350	-.0300	-.0280
90.000	-.0270	-.0310	-.0350	-.0371	-.0401	-.0360	-.0200	-.0129	-.0139
100.000	-.0300	-.0320	-.0320	-.0340	-.0330	.0071			
110.000	-.0381	-.0401	-.0401	-.0360	-.0180	.0704			
120.000						.1498			
130.000						.1166			
140.000						-.0200			
150.000						-.0320			
160.000						.0423			
170.000						.0292			
180.000	-.0340	-.0371	-.0371	-.0371	-.0139	.1428			

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (3) = 4.000 ALPHA (3) = 12.010 RN/L = 3.5010 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1541	.1276	.0952												
70.000	.1354	.1158	.0913												
80.000	.1187	.1089	.0893												
90.000			.0923	.0599	.0079	-.0098	-.0118	-.0127	-.0147	-.0167	-.0186	-.0196	-.0229	-.0229	-.0239
100.000						-.0098	-.0108	-.0127	-.0157	-.0186	-.0206	-.0226	-.0250	-.0261	-.0282
110.000						-.0059	-.0098	-.0137	-.0186	-.0226	-.0255	-.0293	-.0314	-.0336	-.0347
120.000						-.0020								-.0614	
130.000						.0206								-.0614	
140.000						-.0559								-.0614	
150.000						-.0598								-.0604	
160.000						-.0589								-.0593	
170.000						-.0589								-.0572	
180.000						-.0589	-.0579	-.0579	-.0569	-.0569	-.0569	-.0572	-.0572	-.0561	-.0550

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0239	-.0250	-.0250	-.0250	-.0250	-.0261	-.0286	-.0296	-.0306	-.0316	-.0316	-.0336	-.0316	-.0306	-.0271
100.000	-.0282	-.0282	-.0282	-.0282	-.0282	-.0282	-.0296	-.0296	-.0316	-.0316	-.0326	-.0336	-.0346	-.0346	-.0301
110.000	-.0357	-.0357	-.0357	-.0357	-.0186	-.0347	-.0365	-.0365	-.0375	-.0375	-.0326	-.0395	-.0405	-.0405	-.0362
120.000						-.0668								-.0614	
130.000						-.0714								-.0614	
140.000						-.0734								-.0614	
150.000						-.0564								-.0614	
160.000						-.0535								-.0515	
170.000						-.0465								-.0455	
180.000	-.0529	-.0507	-.0486	-.0454	-.0443	-.0445	-.0435	-.0435	-.0435	-.0435	-.0435	-.0435	-.0435	-.0445	-.0402

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0712		
70.000							-.0622	-.0532	-.0622
80.000							-.0412	-.0432	-.0472
90.000	-.0281	-.0301	-.0362	-.0362	-.0392	-.0301	-.0261	-.0271	-.0171
100.000	-.0261	-.0291	-.0301	-.0312	-.0312	-.0181			
110.000	-.0362	-.0382	-.0362	-.0342	-.0161	.0851			
120.000						.1432			
130.000						.0901			
140.000						-.0271			
150.000						-.0171			
160.000						.0180			
170.000						-.0131			
180.000	-.0362	-.0372	-.0372	-.0382	-.0201	.1583			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (R04003)

OA64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (4) = 14.000 RN/L = 3.5010 BETA = .0000

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1125	.1120	.0982												
70.000	.1250	.1150	.0913												
80.000	.1051	.1022	.0864												
90.000			.0834	.0538	.0064	-.0103	-.0133	-.0163	-.0172	-.0192	-.0212	-.0212	-.0258	-.0258	-.0289
100.000						-.0113	-.0133	-.0163	-.0182	-.0212	-.0232	-.0242	-.0280	-.0291	-.0291
110.000						-.0084	-.0123	-.0172	-.0222	-.0261	-.0291	-.0324	-.0345	-.0345	-.0367
120.000						-.0084								-.0751	
130.000						-.0232								-.0718	
140.000						-.0597								-.0685	
150.000						-.0636								-.0674	
160.000						-.0626								-.0663	
170.000						-.0617								-.0608	
180.000						-.0617	-.0607	-.0617	-.0607	-.0607	-.0597	-.0619	-.0608	-.0597	-.0575

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0289	-.0289	-.0289	-.0280	-.0280	-.0291	-.0294	-.0304	-.0304	-.0314	-.0314	-.0324	-.0324	-.0314	-.0310
100.000	-.0291	-.0291	-.0291	-.0291	-.0291	-.0291	-.0304	-.0304	-.0314	-.0324	-.0314	-.0324	-.0334	-.0314	-.0300
110.000	-.0367	-.0367	-.0356	-.0356	-.0214	-.0367	-.0354	-.0354	-.0364	-.0374	-.0314	-.0394	-.0394	-.0394	-.0371
120.000						-.0751								-.0663	
130.000						-.0743								-.0673	
140.000						-.0793								-.0675	
150.000						-.0743								-.0683	
160.000						-.0614								-.0624	
170.000						-.0504								-.0544	
180.000	-.0355	-.0352	-.0321	-.0499	-.0488	-.0484	-.0484	-.0454	-.0454	-.0454	-.0464	-.0494	-.0504	-.0514	-.0491

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0762		
70.000							-.0752	-.0752	-.0692
80.000							-.0602	-.0622	-.0662
90.000	-.0290	-.0360	-.0401	-.0431	-.0451	-.0391	-.0391	-.0340	-.0220
100.000	-.0290	-.0310	-.0320	-.0350	-.0360	-.0330			
110.000	-.0360	-.0381	-.0371	-.0360	-.0180	.0996			
120.000						.1357			
130.000						.0664			
140.000						-.0230			
150.000						-.0220			
160.000						-.0129			
170.000						-.0391			
180.000	-.0471	-.0481	-.0481	-.0461	-.0270	.1598			

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (3) = 4.000 ALPHA (5) = 16.010 RN/L = 3.5010 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.087	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1459	.0916	.0975												
70.000	.1123	.1084	.0886												
80.000	.0856	.0906	.0817												
90.000			.0698	.0451	.0016	-.0152	-.0171	-.0181	-.0201	-.0211	-.0221	-.0231	-.0239	-.0239	-.0239
100.000						-.0171	-.0191	-.0201	-.0221	-.0231	-.0251	-.0241	-.0250	-.0261	-.0261
110.000						-.0171	-.0191	-.0221	-.0260	-.0280	-.0300	-.0304	-.0314	-.0325	-.0325
120.000						-.0171								-.0775	
130.000						-.0310								-.0754	
140.000						-.0656								-.0711	
150.000						-.0705								-.0689	
160.000						-.0685								-.0679	
170.000						-.0666								-.0593	
180.000						-.0666	-.0656	-.0656	-.0636	-.0626	-.0616	-.0593	-.0582	-.0572	-.0539

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0239	-.0250	-.0250	-.0250	-.0250	-.0250	-.0260	-.0260	-.0280	-.0280	-.0280	-.0280	-.0290	-.0300	-.0356
100.000	-.0261	-.0272	-.0250	-.0261	-.0272	-.0272	-.0270	-.0270	-.0280	-.0290	-.0280	-.0280	-.0290	-.0300	-.0325
110.000	-.0325	-.0325	-.0314	-.0304	-.0197	-.0314	-.0320	-.0330	-.0330	-.0349	-.0280	-.0339	-.0339	-.0349	-.0366
120.000						-.0743								-.0666	
130.000						-.0745								-.0666	
140.000						-.0774								-.0666	
150.000						-.0794								-.0675	
160.000						-.0705								-.0675	
170.000						-.0478								-.0616	
180.000	-.0518	-.0518	-.0497	-.0475	-.0464	-.0458	-.0458	-.0468	-.0498	-.0517	-.0537	-.0557	-.0577	-.0577	-.0599

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0781		
70.000							-.0832	-.0802	-.0751
80.000							-.0741	-.0761	-.0771
90.000	-.0378	-.0467	-.0508	-.0548	-.0599	-.0559	-.0559	-.0599	-.0488
100.000	-.0293	-.0336	-.0356	-.0386	-.0407	-.0488			
110.000	-.0348	-.0368	-.0376	-.0366	-.0224	.1073			
120.000						.1336			
130.000						.0546			
140.000						-.0356			
150.000						-.0285			
160.000						-.0325			
170.000						-.0477			
180.000	-.0348	-.0348	-.0379	-.0318	-.0396	.1255			

OA84 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (3) = 4.000 ALPHA (6) = 17.990 RN/L = 3.5010 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1434	.0761	.0999												
70.000	.1009	.1058	.0890												
80.000	.0711	.0801	.0791												
90.000			.0603	.0404	-.0002	-.0170	-.0180	-.0190	-.0210	-.0219	-.0229	-.0239	-.0217	-.0239	-.0228
100.000						-.0210	-.0219	-.0219	-.0249	-.0259	-.0269	-.0269	-.0249	-.0249	-.0249
110.000						-.0259	-.0249	-.0279	-.0289	-.0318	-.0328	-.0315	-.0315	-.0315	-.0315
120.000						-.0279								-.0817	
130.000						-.0427								-.0806	
140.000						-.0675								-.0784	
150.000						-.0744								-.0751	
160.000						-.0725								-.0718	
170.000						-.0695								-.0609	
180.000						-.0695	-.0685	-.0655	-.0675	-.0645	-.0635	-.0588	-.0577	-.0566	-.0544

X/L	.4900	.4660	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0239	-.0239	-.0239	-.0239	-.0239	-.0239	-.0270	-.0290	-.0300	-.0310	-.0320	-.0340	-.0381	-.0411	-.0458
100.000	-.0249	-.0249	-.0249	-.0249	-.0249	-.0260	-.0300	-.0310	-.0310	-.0310	-.0310	-.0340	-.0290	-.0330	-.0276
110.000	-.0315	-.0304	-.0304	-.0293	-.0195	-.0315	-.0350	-.0360	-.0360	-.0360	-.0310	-.0340	-.0350	-.0320	-.0306
120.000						-.0784								-.0742	
130.000						-.0812								-.0742	
140.000						-.0833								-.0732	
150.000						-.0823								-.0742	
160.000						-.0822								-.0742	
170.000						-.0571								-.0732	
180.000	-.0533	-.0533	-.0511	-.0500	-.0478	-.0521	-.0551	-.0592	-.0622	-.0652	-.0672	-.0682	-.0692	-.0712	-.0650

X/L	.7290	.7470	.7870	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0792		
70.000							-.0832	-.0792	-.0771
80.000							-.0822	-.0822	-.0812
90.000	-.0488	-.0599	-.0610	-.0670	-.0721	-.0691	-.0701	-.0721	-.0630
100.000	-.0306	-.0387	-.0407	-.0468	-.0519	-.0610			
110.000	-.0296	-.0336	-.0357	-.0367	-.0286	.0888			
120.000						.1384			
130.000						.0503			
140.000						-.0427			
150.000						-.0336			
160.000						-.0387			
170.000						-.0468			
180.000	-.0810	-.0820	-.0810	-.0498	-.0448	.0665			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4003)

OA64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (7) = 20.010 RN/L = 3.5010 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0070	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1401	.0827	.1014												
70.000	.0905	.1034	.0905												
80.000	.0587	.0896	.0776												
90.000			.0507	.0368	.0001	-.0158	-.0178	-.0168	-.0188	-.0188	-.0198	-.0208	-.0206	-.0195	-.0195
100.000						-.0218	-.0227	-.0227	-.0227	-.0237	-.0247	-.0247	-.0238	-.0238	-.0238
110.000						-.0337	-.0297	-.0297	-.0297	-.0317	-.0327	-.0292	-.0303	-.0292	-.0292
120.000						-.0357								-.0828	
130.000						-.0506								-.0818	
140.000						-.0664								-.0828	
150.000						-.0754								-.0786	
160.000						-.0744								-.0743	
170.000						-.0714								-.0614	
180.000						-.0714	-.0694	-.0684	-.0664	-.0645	-.0615	-.0571	-.0560	-.0560	-.0560

X/L	.4500	.4680	.4860	.5091	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0195	-.0208	-.0195	-.0195	-.0185	-.0185	-.0220	-.0301	-.0311	-.0321	-.0361	-.0391	-.0451	-.0521	-.0593
100.000	-.0228	-.0238	-.0238	-.0228	-.0228	-.0217	-.0260	-.0250	-.0270	-.0281	-.0281	-.0301	-.0311	-.0331	-.0333
110.000	-.0292	-.0281	-.0270	-.0281	-.0163	-.0292	-.0331	-.0321	-.0281	-.0321	-.0270	-.0321	-.0311	-.0331	-.0273
120.000						-.0775								-.0762	
130.000						-.0823								-.0752	
140.000						-.0813								-.0762	
150.000						-.0823								-.0762	
160.000						-.0833								-.0762	
170.000						-.0672								-.0772	
180.000	-.0580	-.0549	-.0528	-.0496	-.0496	-.0602	-.0642	-.0682	-.0712	-.0722	-.0732	-.0742	-.0762	-.0762	-.0683

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0773		
70.000							-.0803	-.0773	-.0743
80.000							-.0833	-.0793	-.0743
90.000	-.0833	-.0703	-.0743	-.0763	-.0793	-.0773	-.0793	-.0683	-.0703
100.000	-.0373	-.0483	-.0513	-.0573	-.0613	-.0693			
110.000	-.0273	-.0353	-.0393	-.0413	-.0303	.0517			
120.000						.1208			
130.000						.0547			
140.000						-.0463			
150.000						-.0373			
160.000						-.0383			
170.000						-.0423			
180.000	-.0883	-.0833	-.0573	-.0503	-.0473	.0157			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (3) = 4.000 ALPHA (8) = 20.950 RN/L = 3.5010 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1387	.0561	.1043												
70.000	.0868	.1033	.0905												
80.000	.0332	.0870	.0788												
90.000			.0483	.0375	.0031	-.0136	-.0156	-.0156	-.0156	-.0166	-.0185	-.0195	-.0217	-.0206	-.0217
100.000						-.0195	-.0215	-.0205	-.0205	-.0215	-.0225	-.0205	-.0239	-.0261	-.0239
110.000						-.0352	-.0303	-.0284	-.0284	-.0293	-.0303	-.0326	-.0315	-.0315	-.0315
120.000						-.0372								-.0871	
130.000						-.0500								-.0860	
140.000						-.0667								-.0882	
150.000						-.0736								-.0849	
160.000						-.0726								-.0795	
170.000						-.0706								-.0653	
180.000						-.0706	-.0677	-.0667	-.0647	-.0628	-.0608	-.0610	-.0599	-.0599	-.0599

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0208	-.0217	-.0195	-.0185	-.0206	-.0217	-.0245	-.0285	-.0355	-.0345	-.0395	-.0464	-.0544	-.0614	-.0673
100.000	-.0239	-.0239	-.0239	-.0228	-.0228	-.0228	-.0205	-.0245	-.0215	-.0255	-.0265	-.0275	-.0315	-.0345	-.0353
110.000	-.0304	-.0294	-.0304	-.0304	-.0152	-.0304	-.0285	-.0245	-.0215	-.0255	-.0265	-.0275	-.0275	-.0305	-.0293
120.000						-.0817								-.0743	
130.000						-.0793								-.0743	
140.000						-.0783								-.0753	
150.000						-.0783								-.0753	
160.000						-.0803								-.0743	
170.000						-.0684								-.0763	
180.000	-.0599	-.0599	-.0566	-.0544	-.0555	-.0624	-.0664	-.0703	-.0713	-.0733	-.0733	-.0743	-.0753	-.0763	-.0703

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0793		
70.000							-.0823	-.0793	-.0763
80.000							-.0843	-.0803	-.0763
90.000	-.0893	-.0763	-.0793	-.0813	-.0843	-.0813	-.0833	-.0733	-.0753
100.000	-.0393	-.0503	-.0573	-.0643	-.0683	-.0753			
110.000	-.0303	-.0363	-.0413	-.0443	-.0333	.0347			
120.000						.1128			
130.000						.0507			
140.000						-.0473			
150.000						-.0383			
160.000						-.0383			
170.000						-.0383			
180.000	-.0883	-.0833	-.0573	-.0533	-.0483	.0017			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4003)

OA64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (1) = 7.990 RN/L = 3.4995 BETA = 2.0100

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

Y/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1265	.1011	.0853												
70.000	.1273	.0922	.0675												
80.000	.1243	.0944	.0750												
90.000			.0892	.0466	-.0004	-.0131	-.0176	-.0198	-.0213	-.0228	-.0235	-.0243	-.0277	-.0277	-.0297
100.000						-.0153	-.0190	-.0205	-.0228	-.0243	-.0258	-.0273	-.0290	-.0297	-.0310
110.000						-.0168	-.0198	-.0205	-.0220	-.0250	-.0280	-.0304	-.0317	-.0323	-.0343
120.000						.0026								-.0462	
130.000						-.0131								-.0481	
140.000						-.0377								-.0481	
150.000						-.0377								-.0475	
160.000						-.0414								-.0455	
170.000						-.0422								-.0449	
180.000						-.0429	-.0429	-.0429	-.0429	-.0429	-.0437	-.0449	-.0449	-.0449	-.0449

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0304	-.0310	-.0317	-.0323	-.0330	-.0350	-.0349	-.0357	-.0357	-.0364	-.0364	-.0372	-.0349	-.0372	-.0389
100.000	-.0317	-.0323	-.0330	-.0343	-.0350	-.0363	-.0364	-.0372	-.0387	-.0387	-.0402	-.0372	-.0402	-.0395	-.0389
110.000	-.0349	-.0350	-.0350	-.0363	-.0132	-.0389	-.0395	-.0395	-.0410	-.0417	-.0425	-.0425	-.0432	-.0432	-.0416
120.000						-.0468								-.0440	
130.000						-.0425								-.0432	
140.000						-.0402								-.0349	
150.000						-.0402								-.0319	
160.000						-.0402								-.0304	
170.000						-.0402								-.0311	
180.000	-.0442	-.0442	-.0429	-.0422	-.0416	-.0402	-.0395	-.0387	-.0387	-.0372	-.0357	-.0341	-.0349	-.0341	-.0325

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0552		
70.000							-.0461	-.0434	-.0379
80.000							-.0343	-.0316	-.0307
90.000	-.0361	-.0379	-.0398	-.0407	-.0379	-.0334	-.0271	-.0216	-.0244
100.000	-.0370	-.0389	-.0379	-.0343	-.0298	-.0361			
110.000	-.0407	-.0398	-.0352	-.0262	-.0189	.0119			
120.000						.0707			
130.000						.0481			
140.000						.0182			
150.000						.0363			
160.000						.0209			
170.000						.0426			
180.000	-.0298	-.0307	-.0316	-.0280	-.0135	.0499			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ40C3)

OA64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (2) = 9.990 RN/L = 3.4995 BETA = 2.0100

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1244	.1069	.0887												
70.000	.1188	.0895	.0860												
80.000	.1092	.0872	.0713												
90.000			.0834	.0447	.0000	-.0137	-.0197	-.0213	-.0235	-.0258	-.0273	-.0296	-.0313	-.0319	-.0346
100.000						-.0159	-.0213	-.0235	-.0250	-.0281	-.0296	-.0311	-.0339	-.0339	-.0359
110.000						-.0152	-.0213	-.0235	-.0266	-.0311	-.0326	-.0339	-.0366	-.0373	-.0406
120.000						-.0046								-.0526	
130.000						-.0197								-.0539	
140.000						-.0440								-.0532	
150.000						-.0440								-.0526	
160.000						-.0493								-.0512	
170.000						-.0493								-.0512	
180.000						-.0493	-.0501	-.0501	-.0508	-.0516	-.0516	-.0512	-.0512	-.0512	-.0506

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0359	-.0373	-.0373	-.0386	-.0393	-.0393	-.0363	-.0363	-.0378	-.0378	-.0393	-.0378	-.0378	-.0385	-.0386
100.000	-.0373	-.0386	-.0399	-.0406	-.0419	-.0426	-.0393	-.0393	-.0393	-.0393	-.0393	-.0393	-.0378	-.0401	-.0413
110.000	-.0413	-.0419	-.0439	-.0446	-.0280	-.0479	-.0454	-.0454	-.0439	-.0431	-.0431	-.0424	-.0424	-.0431	-.0422
120.000						-.0546								-.0431	
130.000						-.0492								-.0462	
140.000						-.0431								-.0439	
150.000						-.0408								-.0378	
160.000						-.0408								-.0347	
170.000						-.0416								-.0347	
180.000	-.0506	-.0493	-.0479	-.0473	-.0473	-.0431	-.0416	-.0408	-.0393	-.0378	-.0378	-.0370	-.0378	-.0378	-.0386

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.0605		
60.000							-.0578	-.0578	-.0550
70.000							-.0441	-.0459	-.0477
80.000							-.0349	-.0377	-.0304
90.000	-.0359	-.0404	-.0413	-.0404	-.0395	-.0359			
100.000	-.0386	-.0404	-.0368	-.0322	-.0304	-.0295			
110.000	-.0413	-.0386	-.0322	-.0278	-.0276	-.0085			
120.000						.1111			
130.000						.0591			
140.000						-.0112			
150.000						.0244			
160.000						.0253			
170.000						.0308			
180.000	-.0359	-.0377	-.0377	-.0340	-.0194	.0792			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4003)

OA64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.300 ALPHA (3) = 12.000 RN/L = 5.4995 BETA = 2.0100

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1168	.0940	.0640												
70.000	.1023	.0828	.0602												
80.000	.0905	.0760	.0625												
90.000			.0730	.0399	-.0029	-.0164	-.0194	-.0217	-.0240	-.0262	-.0255	-.0292	-.0304	-.0310	-.0330
100.000						-.0164	-.0194	-.0225	-.0255	-.0247	-.0285	-.0315	-.0323	-.0343	-.0356
110.000						-.0164	-.0202	-.0240	-.0285	-.0292	-.0345	-.0343	-.0376	-.0383	-.0409
120.000						-.0157								-.0521	
130.000						-.0262								-.0521	
140.000						-.0465								-.0508	
150.000						-.0472								-.0508	
160.000						-.0518								-.0501	
170.000						-.0518	-.0525	-.0525	-.0533	-.0503	-.0525	-.0508	-.0508	-.0501	-.0495
180.000															

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0343	-.0350	-.0343	-.0343	-.0350	-.0350	-.0383	-.0390	-.0398	-.0398	-.0406	-.0406	-.0406	-.0398	-.0378
100.000	-.0363	-.0376	-.0369	-.0369	-.0376	-.0369	-.0390	-.0398	-.0406	-.0413	-.0421	-.0421	-.0421	-.0421	-.0378
110.000	-.0422	-.0422	-.0422	-.0422	-.0218	-.0416	-.0436	-.0398	-.0444	-.0436	-.0452	-.0452	-.0452	-.0459	-.0414
120.000						-.0541								-.0506	
130.000						-.0575								-.0498	
140.000						-.0521								-.0513	
150.000						-.0482								-.0482	
160.000						-.0444								-.0444	
170.000						-.0452								-.0421	
180.000	-.0488	-.0481	-.0475	-.0462	-.0462	-.0475	-.0475	-.0459	-.0452	-.0436	-.0436	-.0421	-.0406	-.0406	-.0387

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0596		
70.000							-.0633	-.0624	-.0587
80.000							-.0523	-.0569	-.0605
90.000	-.0359	-.0414	-.0423	-.0441	-.0460	-.0396	-.0378	-.0432	-.0314
100.000	-.0387	-.0387	-.0396	-.0396	-.0359	-.0305			
110.000	-.0414	-.0423	-.0414	-.0369	-.0250	.0187			
120.000						.1134			
130.000						.0888			
140.000						-.0250			
150.000						.0469			
160.000						.0214			
170.000						.0159			
180.000	-.0389	-.0396	-.0378	-.0296	-.0177	.1261			

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (4) = 4.500 ALPHA (4) = 14.000 RN/L = 3.4995 BETA = 2.0100

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1143	.0813	.0662												
70.000	.0933	.0805	.0602												
80.000	.0767	.0700	.0587												
90.000			.0655	.0369	-.0037	-.0164	-.0194	-.0217	-.0240	-.0255	-.0270	-.0285	-.0322	-.0322	-.03 2
100.000						-.0172	-.0194	-.0217	-.0247	-.0270	-.0292	-.0315	-.0342	-.0348	-.0355
110.000						-.0149	-.0194	-.0240	-.0277	-.0322	-.0352	-.0375	-.0388	-.0395	-.0401
120.000						-.0164								-.0606	
130.000						-.0285								-.0567	
140.000						-.0518								-.0547	
150.000						-.0518								-.0540	
160.000						-.0518								-.0520	
170.000						-.0525								-.0520	
180.000						-.0525	-.0525	-.0525	-.0525	-.0525	-.0525	-.0533	-.0527	-.0527	-.0520

X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0342	-.0342	-.0342	-.0348	-.0348	-.0355	-.0367	-.0375	-.0375	-.0375	-.0383	-.0390	-.0390	-.0383	-.0387
100.000	-.0355	-.0361	-.0361	-.0335	-.0361	-.0361	-.0383	-.0390	-.0390	-.0390	-.0398	-.0406	-.0383	-.0406	-.0350
110.000	-.0408	-.0408	-.0401	-.0395	-.0203	-.0401	-.0421	-.0429	-.0429	-.0436	-.0436	-.0436	-.0436	-.0444	-.0405
120.000						-.0593								-.0521	
130.000						-.0613								-.0521	
140.000						-.0621								-.0521	
150.000						-.0552								-.0536	
160.000						-.0482								-.0490	
170.000						-.0475								-.0475	
180.000	-.0507	-.0507	-.0494	-.0494	-.0487	-.0513	-.0513	-.0498	-.0498	-.0490	-.0482	-.0467	-.0459	-.0467	-.0469

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0642		
70.000							-.0687	-.0660	-.0642
80.000							-.0651	-.0660	-.0669
90.000	-.0414	-.0460	-.0496	-.0505	-.0542	-.0496	-.0523	-.0578	-.0569
100.000	-.0359	-.0405	-.0414	-.0423	-.0405	-.0378			
110.000	-.0405	-.0423	-.0423	-.0405	-.0259	.0278			
120.000						.0979			
130.000						.0697			
140.000						-.0250			
150.000						.0214			
160.000						-.0086			
170.000						-.0159			
180.000	-.0469	-.0505	-.0460	-.0369	-.0314	.0888			

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (4) = 4.500 ALPHA (5) = 16.010 RN/L = 3.4995 BETA = 2.0100

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1102	.0873	.0873												
70.000	.0831	.0763	.0590												
80.000	.0655	.0620	.0530												
90.000			.0545	.0289	-.0073	-.0201	-.0231	-.0246	-.0254	-.0276	-.0284	-.0291	-.0326	-.0339	-.0333
100.000						-.0216	-.0231	-.0254	-.0269	-.0291	-.0299	-.0306	-.0339	-.0353	-.0353
110.000						-.0208	-.0246	-.0276	-.0306	-.0329	-.0351	-.0373	-.0393	-.0393	-.0399
120.000						-.0216								-.0666	
130.000						-.0329								-.0659	
140.000						-.0555								-.0592	
150.000						-.0555								-.0579	
160.000						-.0555								-.0539	
170.000						-.0555								-.0532	
180.000						-.0555	-.0555	-.0555	-.0555	-.0547	-.0547	-.0559	-.0552	-.0552	-.0539

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0339	-.0346	-.0339	-.0339	-.0339	-.0339	-.0345	-.0345	-.0345	-.0337	-.0360	-.0399	-.0391	-.0437	-.0531
100.000	-.0388	-.0365	-.0353	-.0353	-.0366	-.0366	-.0360	-.0360	-.0360	-.0360	-.0360	-.0360	-.0360	-.0360	-.0393
110.000	-.0399	-.0399	-.0399	-.0393	-.0166	-.0399	-.0406	-.0368	-.0406	-.0406	-.0414	-.0360	-.0399	-.0399	-.0403
120.000						-.0632								-.0552	
130.000						-.0629								-.0544	
140.000						-.0629								-.0552	
150.000						-.0598								-.0567	
160.000						-.0514								-.0567	
170.000						-.0475								-.0552	
180.000	-.0539	-.0539	-.0539	-.0532	-.0486	-.0552	-.0552	-.0544	-.0529	-.0537	-.0537	-.0514	-.0521	-.0537	-.0568

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0678		
70.000							-.0705	-.0687	-.0669
80.000							-.0696	-.0705	-.0687
90.000	-.0513	-.0568	-.0614	-.0641	-.0660	-.0641	-.0650	-.0678	-.0595
100.000	-.0403	-.0448	-.0467	-.0513	-.0531	-.0522			
110.000	-.0393	-.0439	-.0430	-.0421	-.0311	.0323			
120.000						.0956			
130.000						.0571			
140.000						-.0274			
150.000						-.0127			
160.000						-.0311			
170.000						-.0375			
180.000	-.0577	-.0577	-.0513	-.0476	-.0467	.0240			

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (4) = 4.500 ALPHA (6) = 16.000 RN/L = 3.4995 BETA = 2.0100

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1071	.0536	.0879												
70.000	.0725	.0732	.0589												
80.000	.0499	.0529	.0499												
90.000			.0401	.0213	-.0103	-.0224	-.0239	-.0254	-.0261	-.0269	-.0269	-.0291	-.0298	-.0285	-.0285
100.000						-.0254	-.0261	-.0269	-.0276	-.0291	-.0299	-.0307	-.0305	-.0311	-.0324
110.000						-.0276	-.0284	-.0299	-.0299	-.0307	-.0352	-.0337	-.0351	-.0351	-.0357
120.000						-.0284								-.0640	
130.000						-.0389								-.0640	
140.000						-.0562								-.0633	
150.000						-.0562								-.0567	
160.000						-.0578								-.0515	
170.000						-.0578								-.0489	
180.000						-.0585	-.0578	-.0570	-.0555	-.0540	-.0562	-.0535	-.0528	-.0528	-.0528

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0285	-.0285	-.0278	-.0278	-.0265	-.0265	-.0299	-.0322	-.0353	-.0368	-.0399	-.0422	-.0491	-.0544	-.0596
100.000	-.0311	-.0311	-.0311	-.0305	-.0305	-.0305	-.0330	-.0337	-.0337	-.0330	-.0337	-.0345	-.0360	-.0391	-.0433
110.000	-.0357	-.0364	-.0344	-.0351	-.0055	-.0357	-.0383	-.0368	-.0383	-.0383	-.0383	-.0368	-.0360	-.0360	-.0342
120.000						-.0594								-.0560	
130.000						-.0629								-.0567	
140.000						-.0636								-.0583	
150.000						-.0644								-.0590	
160.000						-.0583								-.0606	
170.000						-.0506								-.0613	
180.000	-.0535	-.0535	-.0528	-.0528	-.0482	-.0550	-.0567	-.0567	-.0583	-.0583	-.0567	-.0583	-.0598	-.0613	-.0596

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0660		
70.000							-.0678	-.0660	-.0660
80.000							-.0678	-.0669	-.0651
90.000	-.0805	-.0842	-.0660	-.0669	-.0678	-.0660	-.0678	-.0669	-.0642
100.000	-.0442	-.0487	-.0514	-.0542	-.0560	-.0578			
110.000	-.0378	-.0442	-.0433	-.0414	-.0323	.0022			
120.000						.0896			
130.000						.0568			
140.000						-.0205			
150.000						-.0223			
160.000						-.0323			
170.000						-.0342			
180.000	-.0578	-.0535	-.0487	-.0469	-.0442	-.0205			

OA64 ORBITER ENTRY CONFIGURATION (RQ4005)

MACH (4) = 4.500 ALPHA (7) = 20.010 RN/L = 3.4995 BETA = 2.0100

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1032	.0377	.0674												
70.000	.0628	.0705	.0583												
80.000	.0369	.0430	.0468												
90.000			.0270	.0156	-.0134	-.0248	-.0271	-.0279	-.0286	-.0294	-.0302	-.0324	-.0329	-.0329	-.0329
100.000						-.0294	-.0309	-.0317	-.0317	-.0324	-.0332	-.0340	-.0362	-.0376	-.0362
110.000						-.0362	-.0355	-.0362	-.0370	-.0385	-.0385	-.0396	-.0410	-.0416	-.0423
120.000						-.0370								-.0732	
130.000						-.0477								-.0732	
140.000						-.0584								-.0739	
150.000						-.0591								-.0679	
160.000						-.0637								-.0605	
170.000						-.0629								-.0564	
180.000						-.0629	-.0622	-.0622	-.0614	-.0606	-.0606	-.0611	-.0611	-.0611	-.0618

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0315	-.0309	-.0302	-.0302	-.0302	-.0315	-.0309	-.0325	-.0356	-.0473	-.0589	-.0651	-.0698	-.0713	-.0724
100.000	-.0362	-.0356	-.0349	-.0342	-.0342	-.0336	-.0325	-.0341	-.0348	-.0348	-.0348	-.0387	-.0410	-.0434	-.0475
110.000	-.0410	-.0403	-.0403	-.0396	-.0228	-.0396	-.0395	-.0387	-.0372	-.0379	-.0387	-.0395	-.0403	-.0426	-.0411
120.000						-.0672								-.0620	
130.000						-.0667								-.0612	
140.000						-.0682								-.0659	
150.000						-.0690								-.0651	
160.000						-.0643								-.0659	
170.000						-.0573								-.0674	
180.000	-.0618	-.0618	-.0618	-.0598	-.0631	-.0643	-.0643	-.0651	-.0659	-.0667	-.0667	-.0682	-.0690	-.0698	-.0641

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0687		
70.000							-.0696	-.0687	-.0641
80.000							-.0715	-.0669	-.0659
90.000	-.0715	-.0733	-.0752	-.0752	-.0733	-.0724	-.0715	-.0684	-.0669
100.000	-.0558	-.0632	-.0678	-.0705	-.0687	-.0696			
110.000	-.0420	-.0503	-.0549	-.0512	-.0512	-.0420			
120.000						.0639			
130.000						.0381			
140.000						-.0309			
150.000						-.0365			
160.000						-.0383			
170.000						-.0337			
180.000	-.0595	-.0577	-.0558	-.0549	-.0521	-.0328			

OA64 ORBITER ENTRY CONFIGURATION (R04003)

MACH (4) = 4.500 ALPHA (8) = 20.970 RN/L = 3.4995 BETA = 2.0100

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1018	.0309	.0675												
70.000	.0583	.0698	.0583												
80.000	.0316	.0393	.0461												
90.000			.0225	.0141	-.0126	-.0248	-.0263	-.0271	-.0278	-.0286	-.0301	-.0309	-.0268	-.0268	-.0261
100.000						-.0301	-.0317	-.0309	-.0317	-.0324	-.0324	-.0324	-.0321	-.0327	-.0308
110.000						-.0393	-.0378	-.0370	-.0370	-.0385	-.0385	-.0354	-.0367	-.0354	-.0380
120.000						-.0408								-.0686	
130.000						-.0515								-.0686	
140.000						-.0614								-.0692	
150.000						-.0614								-.0659	
160.000						-.0644								-.0560	
170.000						-.0644								-.0526	
180.000						-.0637	-.0629	-.0622	-.0622	-.0614	-.0614	-.0573	-.0573	-.0579	-.0586

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0254	-.0248	-.0241	-.0248	-.0241	-.0248	-.0302	-.0403	-.0543	-.0659	-.0705	-.0729	-.0744	-.0767	-.1082
100.000	-.0301	-.0294	-.0294	-.0288	-.0274	-.0288	-.0318	-.0326	-.0333	-.0326	-.0326	-.0372	-.0434	-.0543	-.0614
110.000	-.0354	-.0354	-.0354	-.0347	-.0201	-.0341	-.0364	-.0364	-.0364	-.0372	-.0388	-.0395	-.0403	-.0426	-.0448
120.000						-.0639								-.0628	
130.000						-.0674								-.0620	
140.000						-.0690								-.0674	
150.000						-.0690								-.0667	
160.000						-.0667								-.0667	
170.000						-.0597								-.0682	
180.000	-.0586	-.0586	-.0593	-.0599	-.0599	-.0651	-.0667	-.0682	-.0690	-.0698	-.0705	-.0705	-.0705	-.0698	-.0641

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0678		
70.000							-.0696	-.0669	-.0660
80.000							-.0687	-.0678	-.0678
90.000	-.0781	-.0779	-.0779	-.0761	-.0742	-.0724	-.0678	-.0669	-.0687
100.000	-.0860	-.0724	-.0751	-.0742	-.0724	-.0669			
110.000	-.0457	-.0522	-.0568	-.0586	-.0586	-.0577			
120.000						.0591			
130.000						.0343			
140.000						-.0338			
150.000						-.0338			
160.000						-.0402			
170.000						-.0336			
180.000	-.0814	-.0804	-.0586	-.0586	-.0549	-.0329			

OA64 ORBITER ENTRY CONFIGURATION (RQ4004) (03 JAN 74)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 IN.
LREF = .0000 IN. YMRP = .0000 IN.
BREF = .0000 IN. ZMRP = .0000 IN.
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = -15.000

MACH (1) = 2.500 ALPHA (1) = 8.000 RN/L = 2.5015 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1779	.1590	.1050												
70.000	.1736	.1444	.1065												
80.000	.1706	.1488	.1152												
90.000			.1429	.0714	-.0119	-.0361	-.0361	-.0331	-.0286	-.0286	-.0255	-.0240	-.0228	-.0262	-.0297
100.000						-.0255	-.0225	-.0225	-.0240	-.0286	-.0316	-.0331	-.0365	-.0382	-.0400
110.000						-.0225	-.0270	-.0301	-.0361	-.0483	-.0528	-.0554	-.0588	-.0623	-.0640
120.000						-.0043								-.1188	
130.000						-.0634								-.1137	
140.000						-.1270								-.1051	
150.000						-.1301								-.0983	
160.000						-.1225								-.0914	
170.000						-.1195								-.0845	
180.000						-.1180	-.1134	-.1119	-.1058	-.0967	-.0892	-.0880	-.0828	-.0845	-.0811

X/L	.4500	.4680	.4960	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0314	-.0365	-.0365	-.0400	-.0400	-.0400	-.0424	-.0424	-.0486	-.0502	-.0502	-.0440	-.0393	-.0393	-.0449
100.000	-.0496	-.0434	-.0468	-.0485	-.0520	-.0537	-.0548	-.0548	-.0579	-.0595	-.0595	-.0564	-.0548	-.0486	-.0449
110.000	-.0857	-.0857	-.0857	-.0857	-.0537	-.0691	-.0672	-.0750	-.0750	-.0750	-.0750	-.0719	-.0705	-.0657	-.0590
120.000						-.1103								-.0703	
130.000						-.0688								-.0734	
140.000						-.0595								-.0424	
150.000						-.0533								-.0316	
160.000						-.0486								-.0284	
170.000						-.0455								-.0238	
180.000	-.0794	-.0743	-.0674	-.0623	-.0537	-.0440	-.0409	-.0362	-.0331	-.0300	-.0284	-.0253	-.0253	-.0238	-.0213

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1045		
70.000							-.0857	-.0669	-.0778
80.000							-.0449	-.0496	-.0700
90.000	-.0543	-.0700	-.0826	-.0888	-.0920	-.0512	-.0213	-.0370	-.0590
100.000	-.0480	-.0653	-.0700	-.0794	-.0653	-.0857			
110.000	-.0496	-.0637	-.0669	-.0292	.0392	.0507			
120.000						.2227			

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (1) = 2.500 ALPHA (1) = 8.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8520	.9000	.9400
PHI									
130.000						.2427			
140.000						.1123			
150.000						.1510			
160.000						.1940			
170.000						.1711			
180.000	-.0088	-.0166	-.0182	-.0150	.1582	.3717			

CH (1) = 2.500 ALPHA (2) = 10.000 RN/L = 2.5015 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1723	.1489	.1037												
70.000	.1591	.1387	.1051												
80.000	.1489	.1358	.1095												
90.000			.1329	.0701	-.0126	-.0372	-.0373	-.0342	-.0295	-.0280	-.0249	-.0249	-.0265	-.0285	-.0335
100.000						-.0391	-.0280	-.0280	-.0280	-.0280	-.0295	-.0326	-.0335	-.0369	-.0404
110.000						-.0172	-.0234	-.0295	-.0342	-.0465	-.0527	-.0559	-.0576	-.0611	-.0611
120.000						-.0049								-.1284	
130.000						-.0712								-.1284	
140.000						-.1375								-.1146	
150.000						-.1406								-.1060	
160.000						-.1345								-.0973	
170.000						-.1314								-.0922	
180.000						-.1298	-.1252	-.1237	-.1175	-.1051	-.0974	-.0939	-.0922	-.0904	-.0887

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0389	-.0404	-.0386	-.0404	-.0386	-.0438	-.0448	-.0448	-.0511	-.0511	-.0527	-.0511	-.0432	-.0432	-.0505
100.000	-.0455	-.0490	-.0542	-.0542	-.0542	-.0524	-.0511	-.0558	-.0589	-.0605	-.0605	-.0636	-.0589	-.0527	-.0521
110.000	-.0611	-.0645	-.0714	-.0749	-.0542	-.0783	-.0746	-.0731	-.0762	-.0778	-.0762	-.0794	-.0778	-.0778	-.0729
120.000						-.1336								-.0935	
130.000						-.1013								-.1155	
140.000						-.0668								-.0684	
150.000						-.0558								-.0448	
160.000						-.0527								-.0385	
170.000						-.0479								-.0338	
180.000	-.0855	-.0788	-.0680	-.0594	-.0542	-.0479	-.0448	-.0385	-.0369	-.0307	-.0307	-.0291	-.0322	-.0322	-.0330

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									

OA64 ORBITER ENTRY CONFIGURATION (R34004)

MACH (1) = 2.500 ALPHA (2) = 10.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1300		
70.000							-.1093	-.0982	-.1046
80.000							-.0664	-.0696	-.0887
90.000	-.0569	-.0775	-.0855	-.0934	-.1014	-.0871	-.0410	-.0521	-.0759
100.000	-.0537	-.0712	-.0775	-.0871	-.0887	-.0855			
110.000	-.0648	-.0775	-.0839	-.0616	.0194	.0451			
120.000						.2030			
130.000						.1872			
140.000						.0623			
150.000						.1628			
160.000						.2059			
170.000						.1800			
180.000	-.0187	-.0235	-.0267	-.0235	.1241	.4126			

MACH (1) = 2.500 ALPHA (3) = 12.010 RN/L = 2.5015 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1690	.1311	.1034												
70.000	.1442	.1340	.1020												
80.000	.1253	.1224	.1020												
90.000			.1165	.0670	-.0143	-.0374	-.0374	-.0343	-.0312	-.0297	-.0297	-.0312	-.0310	-.0345	-.0362
100.000						-.0359	-.0359	-.0343	-.0328	-.0312	-.0328	-.0343	-.0362	-.0396	-.0447
110.000						-.0189	-.0205	-.0251	-.0312	-.0420	-.0451	-.0447	-.0515	-.0566	-.0685
120.000						-.0081								-.1434	
130.000						-.0744								-.1434	
140.000						-.1453								-.1264	
150.000						-.1484								-.1128	
160.000						-.1422								-.0992	
170.000						-.1376								-.0958	
180.000						-.1376	-.1330	-.1315	-.1222	-.1114	-.1037	-.0992	-.0958	-.0941	-.0872

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0382	-.0379	-.0379	-.0396	-.0413	-.0447	-.0465	-.0465	-.0528	-.0528	-.0544	-.0559	-.0481	-.0449	-.0506
100.000	-.0484	-.0484	-.0464	-.0481	-.0498	-.0532	-.0528	-.0559	-.0575	-.0591	-.0591	-.0638	-.0591	-.0544	-.0538
110.000	-.0702	-.0702	-.0685	-.0685	-.0498	-.0702	-.0701	-.0716	-.0748	-.0779	-.0795	-.0795	-.0795	-.0763	-.0777
120.000						-.1400								-.1109	
130.000						-.1548								-.1187	
140.000						-.0967								-.1234	
150.000						-.0748								-.0701	

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (1) = 2.500 ALPHA (3) = 12.010

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
160.000						-.0622								-.0512	
170.000						-.0512								-.0387	
180.000	-.0821	-.0736	-.0651	-.0583	-.0498	-.0465	-.0465	-.0465	-.0449	-.0418	-.0387	-.0371	-.0355	-.0387	-.0379

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1539		
70.000							-.1364	-.1253	-.1348
80.000							-.0951	-.0920	-.1063
90.000	-.0586	-.0792	-.0920	-.1015	-.1094	-.0999	-.0570	-.0681	-.0920
100.000	-.0538	-.0745	-.0824	-.0935	-.0951	-.0983			
110.000	-.0681	-.0824	-.0920	-.0681	.0002	.0363			
120.000						.1727			
130.000						.1296			
140.000						.0177			
150.000						.0937			
160.000						.2072			
170.000						.1656			
180.000	-.0252	-.0348	-.0364	-.0364	.0145	.4557			

MACH (1) = 2.500 ALPHA (4) = 14.005 RN/L = 2.3015 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.3870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1647	.1107	.1064												
70.000	.1312	.1283	.0991												
80.000	.1049	.1122	.0961												
90.000			.1005	.0597	-.0171	-.0401	-.0386	-.0355	-.0340	-.0355	-.0355	-.0355	-.0366	-.0366	-.0400
100.000						-.0370	-.0355	-.0355	-.0355	-.0370	-.0386	-.0401	-.0435	-.0418	-.0400
110.000						-.0248	-.0309	-.0370	-.0416	-.0462	-.0539	-.0572	-.0589	-.0606	-.0623
120.000						-.0156								-.1583	
130.000						-.0753								-.1532	
140.000						-.1520								-.1395	
150.000						-.1565								-.1223	
160.000						-.1489								-.1052	
170.000						-.1443								-.0983	
180.000						-.1428	-.1397	-.1351	-.1244	-.1136	-.1075	-.1035	-.0983	-.0966	-.0880

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															

OA84 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (1) = 2.500 ALPHA (4) = 14.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0383	-.0400	-.0400	-.0435	-.0435	-.0452	-.0486	-.0533	-.0549	-.0549	-.0565	-.0565	-.0549	-.0470	-.0592
100.000	-.0400	-.0452	-.0400	-.0452	-.0486	-.0520	-.0549	-.0533	-.0581	-.0612	-.0612	-.0628	-.0596	-.0581	-.0576
110.000	-.0623	-.0623	-.0640	-.0658	-.0486	-.0709	-.0707	-.0738	-.0754	-.0786	-.0786	-.0817	-.0802	-.0802	-.0799
120.000						-.1514								-.1165	
130.000						-.1623								-.1323	
140.000						-.1559								-.1417	
150.000						-.0817								-.1102	
160.000						-.0723								-.0738	
170.000						-.0612								-.0549	
180.000	-.0795	-.0709	-.0658	-.0640	-.0623	-.0565	-.0533	-.0502	-.0470	-.0470	-.0439	-.0454	-.0470	-.0470	-.0496

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1726		
70.000							-.1614	-.1598	-.1598
80.000							-.1231	-.1183	-.1295
90.000	-.0688	-.0847	-.0991	-.1105	-.1151	-.1039	-.0847	-.0831	-.1023
100.000	-.0624	-.0799	-.0879	-.0943	-.0879	-.1039			
110.000	-.0719	-.0879	-.0943	-.0640	-.0192	.0334			
120.000						.1586			
130.000						.0910			
140.000						-.0256			
150.000						.0679			
160.000						.1730			
170.000						.1241			
180.000	-.0352	-.0432	-.0464	-.0480	-.0400	.4825			

MACH (1) = 2.500 ALPHA (5) = 16.000 RN/L = 2.5015 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1802	.0918	.1077												
70.000	.1179	.1223	.0989												
80.000	.0858	.1004	.0916												
90.000			.0829	.0479	-.0206	-.0437	-.0437	-.0406	-.0391	-.0391	-.0391	-.0375	-.0384	-.0384	-.0418
100.000						-.0437	-.0421	-.0406	-.0406	-.0421	-.0421	-.0406	-.0418	-.0384	-.0418
110.000						-.0329	-.0375	-.0421	-.0483	-.0529	-.0560	-.0555	-.0573	-.0573	-.0573
120.000						-.0314								-.1738	
130.000						-.0776								-.1600	
140.000						-.1577								-.1566	
150.000						-.1639								-.1309	

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR 1A35/OA64 (LARC UPWT 1063) (RQ4004)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (5) = 16.000

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI														-.1138	
160.000						-.1562								-.0984	
170.000						-.1515								-.0967	-.0881
180.000						-.1500	-.1469	-.1392	-.1269	-.1176	-.1099	-.1052	-.1001		

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI														-.0666	-.0771
90.000	-.0418	-.0436	-.0418	-.0453	-.0453	-.0487	-.0507	-.0555	-.0555	-.0571	-.0603	-.0555	-.0634	-.0650	-.0644
100.000	-.0418	-.0436	-.0418	-.0470	-.0470	-.0521	-.0539	-.0555	-.0555	-.0555	-.0603	-.0619	-.0634	-.0777	-.0786
110.000	-.0590	-.0624	-.0624	-.0624	-.0470	-.0675	-.0714	-.0746	-.0746	-.0777	-.0793	-.0777	-.0777	-.1174	
120.000						-.1618								-.1381	
130.000						-.1666								-.1428	
140.000						-.1794								-.1492	
150.000						-.1222								-.0984	
160.000						-.0825								-.0698	
170.000						-.0650									
180.000	-.0812	-.0778	-.0727	-.0658	-.0590	-.0571	-.0555	-.0555	-.0571	-.0555	-.0555	-.0571	-.0571	-.0587	-.0629

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.1828		
60.000							-.1860	-.1875	-.1749
70.000							-.1623	-.1497	-.1560
80.000							-.1197	-.1071	-.1197
90.000	-.0885	-.1071	-.1149	-.1213	-.1213	-.1260			
100.000	-.0708	-.0881	-.0960	-.0850	-.0881	-.1213			
110.000	-.0755	-.0881	-.0865	-.0581	-.0597	.0390			
120.000						.1541			
130.000						.0908			
140.000						-.0281			
150.000						.0707			
160.000						.1066			
170.000						.0793			
180.000	-.0518	-.0613	-.0676	-.0692	-.0629	.4362			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4004)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (6) = 18.000 RN/L = 2.5015 BETA = .0000

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1548	.0699	.1093												
70.000	.1049	.1166	.0991												
80.000	.0685	.0874	.0860												
90.000			.0654	.0378	-.0261	-.0512	-.0496	-.0465	-.0449	-.0449	-.0434	-.0418	-.0427	-.0462	-.0462
100.000						-.0528	-.0512	-.0496	-.0481	-.0481	-.0465	-.0449	-.0445	-.0445	-.0462
110.000						-.0496	-.0496	-.0528	-.0559	-.0575	-.0575	-.0584	-.0584	-.0584	-.0601
120.000						-.0465								-.1869	
130.000						-.0857								-.1799	
140.000						-.1627								-.1643	
150.000						-.1752								-.1469	
160.000						-.1658								-.1278	
170.000						-.1611								-.1018	
180.000						-.1595	-.1548	-.1454	-.1328	-.1218	-.1140	-.1070	-.1018	-.0983	-.0914

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0462	-.0462	-.0462	-.0479	-.0479	-.0497	-.0527	-.0560	-.0625	-.0625	-.0674	-.0755	-.0771	-.0836	-.1052
100.000	-.0462	-.0479	-.0479	-.0479	-.0479	-.0497	-.0543	-.0560	-.0592	-.0608	-.0608	-.0625	-.0625	-.0674	-.0706
110.000	-.0636	-.0618	-.0636	-.0636	-.0479	-.0688	-.0722	-.0739	-.0739	-.0771	-.0771	-.0771	-.0755	-.0771	-.0788
120.000						-.1678								-.1244	
130.000						-.1716								-.1390	
140.000						-.1813								-.1472	
150.000						-.1748								-.1586	
160.000						-.0983								-.1325	
170.000						-.0722								-.0999	
180.000	-.0898	-.0809	-.0740	-.0670	-.0636	-.0625	-.0641	-.0674	-.0739	-.0771	-.0771	-.0771	-.0820	-.0869	-.0869

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1960		
70.000							-.2041	-.1993	-.1862
80.000							-.1976	-.1830	-.1813
90.000	-.1148	-.1307	-.1439	-.1520	-.1520	-.1634	-.1602	-.1406	-.1553
100.000	-.0804	-.1016	-.1113	-.0983	-.1113	-.1586			
110.000	-.0804	-.0967	-.0934	-.0625	-.0804	.0320			
120.000						.1484			
130.000						.0780			
140.000						-.0120			
150.000						.0521			
160.000						.0593			
170.000						.0435			
180.000	-.0788	-.0853	-.0934	-.0934	-.0657	.3857			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4004)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (7) = 20.000 RN/L = 2.5015 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1515	.0553	.1107												
70.000	.0903	.1107	.0975												
80.000	.0494	.0713	.0815												
90.000			.0480	.0273	-.0301	-.0518	-.0518	-.0502	-.0471	-.0456	-.0456	-.0471	-.0474	-.0457	-.0491
100.000						-.0595	-.0564	-.0549	-.0518	-.0518	-.0502	-.0487	-.0491	-.0491	-.0491
110.000						-.0642	-.0611	-.0611	-.0611	-.0626	-.0611	-.0595	-.0612	-.0612	-.0612
120.000						-.0611								-.1941	
130.000						-.0921								-.1941	
140.000						-.1619								-.1734	
150.000						-.1774								-.1578	
160.000						-.1696								-.1389	
170.000						-.1619								-.1061	
180.000						-.1603	-.1557	-.1464	-.1309	-.1200	-.1123	-.1078	-.1026	-.1009	-.0940

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0474	-.0491	-.0474	-.0491	-.049*	-.0543	-.0549	-.0596	-.0659	-.0770	-.0849	-.0959	-.1038	-.1133	-.1338
100.000	-.0474	-.0491	-.0474	-.0491	-.0491	-.0543	-.0501	-.0565	-.0565	-.0565	-.0596	-.0628	-.0659	-.0754	-.0912
110.000	-.0812	-.0629	-.0629	-.0664	-.0491	-.0664	-.0659	-.0659	-.0675	-.0691	-.0691	-.0691	-.0659	-.0738	-.0786
120.000						-.1699								-.1212	
130.000						-.1654								-.1323	
140.000						- 1765								-.1386	
150.000						-.1812								-.1449	
160.000						-.1275								-.1480	
170.000						-.0849								-.1165	
180.000	-.0905	-.0819	-.0750	-.0698	-.0681	-.0707	-.0754	-.0817	-.0896	-.0912	-.0944	-.0959	-.1007	-.1023	-.1070

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1986		
70.000							-.2002	-.1875	-.1717
80.000							-.2033	-.1954	-.1859
90.000	-.1417	-.*607	-.1701	-.1717	-.1749	-.1828	-.1812	-.1554	-.1686
100.000	-.1007	-.1212	-.1338	-.1291	-.1401	-.1765			
110.000	-.0849	-.1023	-.1133	-.0865	-.1070	-.0201			
120.000						.1297			
130.000						.0765			
140.000						-.0028			
150.000						.0478			
160.000						.0463			
170.000						.0377			
180.000	-.0959	-.1023	-.1133	-.1101	-.0517	.2936			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

OA64 ORBITER ENTRY CONFIGURATION

(R04004)

MACH (1) = 2.300 ALPHA (8) = 20.980 RN/L = 2.5015 BETA = .0000

SECTION (1)FUSELAGE

DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1502	.0454	.1124												
70.000	.0847	.1095	.0978												
80.000	.0410	.0672	.0803												
90.000			.0410	.0244	-.0302	-.0521	-.0505	-.0474	-.0458	-.0458	-.0458	-.0458	-.0450	-.0450	-.0457
100.000						-.0483	-.0583	-.0537	-.0521	-.0505	-.0490	-.0490	-.0484	-.0501	-.0487
110.000						-.0724	-.0677	-.0630	-.0615	-.0615	-.0615	-.0604	-.0604	-.0604	-.0604
120.000						-.0677								-.1943	
130.000						-.0958								-.1943	
140.000						-.1614								-.1840	
150.000						-.1770								-.1582	
160.000						-.1708								-.1376	
170.000						-.1630								-.1050	
180.000						-.1599	-.1552	-.1427	-.1286	-.1161	-.1099	-.1067	-.1016	-.0999	-.0930

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0490	-.0487	-.0467	-.0467	-.0467	-.0518	-.0610	-.0705	-.0768	-.0863	-.0990	-.1100	-.1179	-.1274	-.1454
100.000	-.0487	-.0487	-.0467	-.0467	-.0450	-.0518	-.0515	-.0531	-.0563	-.0579	-.0626	-.0705	-.0737	-.0847	-.1006
110.000	-.0804	-.0821	-.0838	-.0621	-.0467	-.0638	-.0658	-.0658	-.0658	-.0658	-.0626	-.0689	-.0689	-.0737	-.0846
120.000						-.1668								-.1242	
130.000						-.1669								-.1290	
140.000						-.1764								-.1401	
150.000						-.1796								-.1448	
160.000						-.1401								-.1527	
170.000						-.0958								-.1242	
180.000	-.0879	-.0810	-.0741	-.0707	-.0724	-.0784	-.0847	-.0958	-.1005	-.1021	-.1021	-.1053	-.1053	-.1100	-.1166

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.2046		
70.000							-.2046	-.1934	-.1742
80.000							-.2110	-.2030	-.1886
90.000	-.1582	-.1710	-.1838	-.1838	-.1870	-.1966	-.1950	-.1790	-.1822
100.000	-.1118	-.1358	-.1470	-.1422	-.1534	-.1934			
110.000	-.0942	-.1150	-.1182	-.1022	-.1182	-.0476			
120.000						.1027			
130.000						.0782			
140.000						-.0094			
150.000						.0437			
160.000						.0437			
170.000						.0337			
180.000	-.1102	-.1150	-.1214	-.1150	-.0446	.2492			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

OA64 ORBITER ENTRY CONFIGURATION (R04004)

MACH (2) = 2.950 ALPHA (1) = 8.000 RN/L = 2.5130 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1774	.1708	.1061												
70.000	.1757	.1414	.1079												
80.000	.1725	.1483	.1136												
90.000			.1381	.0798	-.0122	-.0366	-.0403	-.0384	-.0366	-.0347	-.0347	-.0328	-.0363	-.0363	-.0383
100.000						-.0328	-.0309	-.0290	-.0309	-.0347	-.0366	-.0366	-.0404	-.0424	-.0424
110.000						-.0215	-.0272	-.0309	-.0347	-.0459	-.0497	-.0548	-.0569	-.0590	-.0610
120.000						-.0009								-.1043	
130.000						-.0478								-.1085	
140.000						-.1060								-.1085	
150.000						-.1135								-.1043	
160.000						-.1097								-.0961	
170.000						-.1097								-.0899	
180.000						-.1079	-.1041	-.1004	-.0985	-.0947	-.0928	-.0899	-.0878	-.0878	-.0837

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5510	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0383	-.0404	-.0424	-.0466	-.0486	-.0486	-.0467	-.0486	-.0560	-.0504	-.0504	-.0523	-.0448	-.0448	-.0513
100.000	-.0383	-.0466	-.0486	-.0507	-.0528	-.0569	-.0560	-.0597	-.0560	-.0597	-.0616	-.0616	-.0579	-.0597	-.0589
110.000	-.0631	-.0631	-.0631	-.0631	-.0486	-.0672	-.0672	-.0709	-.0728	-.0765	-.0747	-.0747	-.0728	-.0728	-.0723
120.000						-.1085								-.0896	
130.000						-.0821								-.0896	
140.000						-.0709								-.0616	
150.000						-.0653								-.0523	
160.000						-.0616								-.0467	
170.000						-.0616								-.0430	
180.000	-.0837	-.0816	-.0775	-.0755	-.0693	-.0616	-.0579	-.0560	-.0504	-.0504	-.0467	-.0467	-.0448	-.0430	-.0458

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0991		
70.000							-.0876	-.0723	-.0723
80.000							-.0589	-.0493	-.0570
90.000	-.0513	-.0647	-.0685	-.0780	-.0819	-.0723	-.0283	-.0321	-.0513
100.000	-.0532	-.0647	-.0685	-.0685	-.0666	-.0685			
110.000	-.0647	-.0647	-.0551	-.0379	-.0130	.0674			
120.000						.2151			
130.000						.2119			
140.000						.0770			
150.000						.0999			
160.000						.1460			
170.000						.1248			
180.000	-.0359	-.0379	-.0398	-.0379	.0693	.2714			

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (2) = 2.950 ALPHA (2) = 10.000 RN/L = 2.5130 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

x/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1741	.1529	.1049												
70.000	.1611	.1382	1049												
80.000	.1512	.1349	.1085												
90.000			.1267	.0740	-.0078	-.0314	-.0351	-.0351	-.0333	-.0333	-.0333	-.0333	-.0338	-.0348	-.0378
100.000						-.0333	-.0351	-.0351	-.0351	-.0351	-.0351	-.0351	-.0378	-.0398	-.0378
110.000						-.0151	-.0224	-.0260	-.0314	-.0423	-.0478	-.0478	-.0518	-.0518	-.0518
120.000						-.0005								-.1060	
130.000						-.0514								-.1100	
140.000						-.1078								-.1080	
150.000						-.1133								-.1060	
160.000						-.1114								-.0959	
170.000						-.1096								-.0919	
180.000						-.1096	-.1060	-.1023	-.1005	-.0987	-.0951	-.0919	-.0899	-.0879	-.0839

x/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0398	-.0418	-.0418	-.0438	-.0418	-.0438	-.0408	-.0445	-.0463	-.0463	-.0500	-.0500	-.0426	-.0445	-.0456
100.000	-.0398	-.0478	-.0518	-.0518	-.0518	-.0518	-.0482	-.0500	-.0482	-.0500	-.0555	-.0555	-.0555	-.0555	-.0530
110.000	-.0558	-.0598	-.0639	-.0679	-.0478	-.0699	-.0647	-.0629	-.0629	-.0647	-.0647	-.0684	-.0684	-.0684	-.0715
120.000						-.1160								-.0924	
130.000						-.1108								-.1016	
140.000						-.0739								-.0850	
150.000						-.0647								-.0611	
160.000						-.0611								-.0519	
170.000						-.0574								-.0482	
180.000	-.0819	-.0799	-.0739	-.0699	-.0639	-.0574	-.0555	-.0500	-.0463	-.0426	-.0408	-.0445	-.0445	-.0463	-.0493

x/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1104		
70.000							-.0919	-.0826	-.0845
80.000							-.0697	-.0548	-.0623
90.000	-.0474	-.0804	-.0678	-.0752	-.0771	-.0808	-.0363	-.0382	-.0530
100.000	-.0474	-.0567	-.0623	-.0678	-.0715	-.0734			
110.000	-.0860	-.0678	-.0660	-.0548	-.0326	.0767			
120.000						.1960			
130.000						.1589			
140.000						.0285			
150.000						.0619			
160.000						.1509			
170.000						.1380			
180.000	-.0419	-.0437	-.0437	-.0437	.0193	.2958			

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (2) = 2.950 ALPHA (3) = 12.010 RN/L = 2.5130 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1695	.1351	.1079												
70.000	.1482	.1351	.1044												
80.000	.1302	.1252	.1027												
90.000			.1131	.0698	-.0030	-.0255	-.0273	-.0255	-.0255	-.0273	-.0273	-.0290	-.0341	-.0361	-.0381
100.000						-.0238	-.0255	-.0238	-.0255	-.0273	-.0290	-.0325	-.0380	-.0399	-.0361
110.000						-.0151	-.0203	-.0238	-.0290	-.0359	-.0377	-.0458	-.0497	-.0516	-.0574
120.000						-.0013								-.1079	
130.000						-.0481								-.1079	
140.000						-.1035								-.1059	
150.000						-.1070								-.1040	
160.000						-.1052								-.0943	
170.000						-.1052								-.0865	
180.000						-.1035	-.1000	-.0960	-.0948	-.0914	-.0896	-.0904	-.0865	-.0846	-.0807

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0361	-.0380	-.0361	-.0380	-.0380	-.0399	-.0361	-.0379	-.0414	-.0467	-.0449	-.0432	-.0414	-.0414	-.0398
100.000	-.0438	-.0380	-.0419	-.0419	-.0419	-.0458	-.0414	-.0379	-.0414	-.0467	-.0467	-.0432	-.0414	-.0414	-.0449
110.000	-.0555	-.0535	-.0555	-.0555	-.0380	-.0555	-.0537	-.0537	-.0537	-.0554	-.0572	-.0572	-.0572	-.0589	-.0589
120.000						-.1137								-.0905	
130.000						-.1168								-.0905	
140.000						-.1080								-.1045	
150.000						-.0677								-.0712	
160.000						-.0624								-.0554	
170.000						-.0519								-.0467	
180.000	-.0788	-.0710	-.0652	-.0594	-.0555	-.0484	-.0484	-.0484	-.0484	-.0467	-.0432	-.0414	-.0414	-.0467	-.0432

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1098		
70.000							-.0993	-.0958	-.0975
80.000							-.0712	-.0730	-.0660
90.000	-.0398	-.0537	-.0624	-.0660	-.0695	-.0607	-.0537	-.0449	-.0449
100.000	-.0398	-.0484	-.0537	-.0572	-.0519	-.0607			
110.000	-.0554	-.0589	-.0572	-.0379	-.0291	.0796			
120.000						.1881			
130.000						.1270			
140.000						-.0151			
150.000						.0287			
160.000						.1318			
170.000						.0936			
180.000	-.0344	-.0379	-.0398	-.0398	-.0168	.3456			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(RQ4004)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (4) = 14.000 RN/L = 2.5130 BETA = .0000

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1661	. 122	.1085												
70.000	.1383	.1302	.1030												
80.000	.1122	.1140	.0974												
90.000			.0993	.0587	-.0094	-.0334	-.0370	-.0370	-.0370	-.0389	-.0389	-.0407	-.0429	-.0429	-.0429
100.000						-.0334	-.0352	-.0370	-.0389	-.0407	-.0426	-.0444	-.0469	-.0469	-.0429
110.000						-.0260	-.0334	-.0370	-.0444	-.0499	-.0536	-.0570	-.0590	-.0590	-.0611
120.000						-.0205								-.1338	
130.000						-.0592								-.1278	
140.000						-.1218								-.1217	
150.000						-.1273								-.1156	
160.000						-.1236								-.1076	
170.000						-.1199								-.0954	
180.000						-.1199	-.1181	-.1144	-.1107	-.1070	-.1034	-.0995	-.0934	-.0934	-.0853

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0449	-.0449	-.0449	-.0449	-.0449	-.0469	-.0459	-.0495	-.0495	-.0514	-.0550	-.0532	-.0495	-.0514	-.0548
100.000	-.0489	-.0469	-.0489	-.0489	-.0489	- 0489	-.0477	-.0495	-.0495	-.0514	-.0550	-.0532	-.0514	-.0495	-.0548
110.000	-.0611	-.0611	-.0590	-.0611	-.0449	-.0631	-.0605	-.0623	-.0623	-.0641	-.0659	-.0659	-.0659	-.0623	-.0678
120.000						-.1298								-.1078	
130.000						-.1260								-.1078	
140.000						-.1405								-.1169	
150.000						-.0878								-.1132	
160.000						-.0732								-.0823	
170.000						-.0659								-.0641	
180.000	-.0813	-.0772	-.0732	-.0732	-.0712	-.0641	-.0623	-.0586	-.0568	-.0550	-.0568	-.0550	-.0568	-.0568	-.0603

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1419		
70.000							-.1345	-.1382	-.1289
80.000							-.1067	-.1104	-.1011
90.000	-.0588	-.0696	-.0770	-.0826	-.0826	-.0807	-.0807	-.0696	-.0640
100.000	-.0511	-.0603	-.0659	-.0640	-.0566	-.0863			
110.000	-.0640	-.0678	-.0659	-.0362	-.0418	.0546			
120.000						.1799			
130.000						.1102			
140.000						-.0307			
150.000						.0175			
160.000						.0806			
170.000						.0268			
180.000	-.0492	-.0548	-.0585	-.0585	-.0381	.3455			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4004)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (5) = 16.010 RN/L = 2.5130 BETA = .0000

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1578	.0938	.1094												
70.000	.1198	.1215	.1007												
80.000	.0903	.1007	.0921												
90.000			.0817	.0505	-.0083	-.0308	-.0326	-.0326	-.0326	-.0326	-.0326	-.0326	-.0340	-.0340	-.0359
100.000						-.0326	-.0326	-.0326	-.0343	-.0360	-.0360	-.0360	-.0379	-.0379	-.0359
110.000						-.0274	-.0308	-.0360	-.0395	-.0430	-.0447	-.0474	-.0493	-.0493	-.0474
120.000						-.025*								-.1297	
130.000						-.0516								-.1221	
140.000						-.1139								-.1163	
150.000						-.1191								-.1106	
160.000						-.1157								-.1067	
170.000						-.1122								-.0838	
180.000						-.1105	-.1070	-.1053	-.1018	-.0966	-.0932	-.0876	-.0838	-.0819	-.0742

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6350	.6540	.6730	.6880	.7100
PHI															
90.000	-.0359	-.0379	-.0359	-.0379	-.0379	-.0379	-.0418	-.0436	-.0453	-.0453	-.0489	-.0471	-.0489	-.0506	-.0538
100.000	-.0359	-.0379	-.0379	-.0379	-.0379	-.0379	-.0418	-.0436	-.0453	-.0453	-.0489	-.0471	-.0489	-.0506	-.0468
110.000	-.0493	-.0493	-.0493	-.0493	-.0359	-.0513	-.0542	-.0560	-.0577	-.0595	-.0595	-.0595	-.0577	-.0595	-.0573
120.000						-.1221								-.1039	
130.000						-.1234								-.1039	
140.000						-.1340								-.1109	
150.000						-.1287								-.1163	
160.000						-.0755								-.0968	
170.000						-.0631								-.0755	
180.000	-.0723	-.0723	-.0685	-.0647	-.0627	-.0595	-.0577	-.0577	-.0577	-.0595	-.0595	-.0613	-.0631	-.0648	-.0643

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1291		
70.000							-.1379	-.1274	-.1204
80.000							-.1 14	-.1239	-.1116
90.000	-.0808	-.0748	-.0818	-.0871	-.0923	-.0888	-.0906	-.0695	-.0801
100.000	-.0485	-.0573	-.0625	-.0678	-.0660	-.0836			
110.000	-.0485	-.0573	-.0625	-.0468	-.0433	.0864			
120.000						.1686			
130.000						.1022			
140.000						-.0170			
150.000						.0140			
160.000						.0373			
170.000						-.0030			
180.000	-.0573	-.0573	-.0625	-.0660	-.0345	.2926			

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (2) = 2.990 ALPHA (6) = 18.000 RN/L = 2.5130 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1579	.0736	.1144												
70.000	.1091	.1197	.1020												
80.000	.0736	.0896	.0896												
90.000			.0683	.0417	-.0133	-.0346	-.0364	-.0346	-.0364	-.0346	-.0346	-.0346	-.0361	-.0381	-.0381
100.000						-.0382	-.0382	-.0382	-.0382	-.0400	-.0400	-.0382	-.0400	-.0361	-.0381
110.000						-.0400	-.0400	-.0435	-.0453	-.0488	-.0488	-.0497	-.0497	-.0497	-.0497
120.000						-.0400								-.1409	
130.000						-.0595								-.1389	
140.000						-.1180								-.1254	
150.000						-.1287								-.1234	
160.000						-.1233								-.1137	
170.000						-.1198								-.0885	
180.000						-.1180	-.1145	-.1109	-.1074	-.1021	-.0967	-.0904	-.0846	-.0846	-.0788

X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0381	-.0400	-.0381	-.0400	-.0400	-.0400	-.0438	-.0438	-.0474	-.0492	-.0528	-.0564	-.0618	-.0654	-.0779
100.000	-.0381	-.0400	-.0400	-.0400	-.0400	-.0419	-.0438	-.0438	-.0474	-.0456	-.0474	-.0492	-.0474	-.0510	-.0528
110.000	-.0497	-.0497	-.0478	-.0478	-.0361	-.0516	-.0546	-.0492	-.0564	-.0564	-.0564	-.0564	-.0474	-.0564	-.0582
120.000						-.1312								-.1085	
130.000						-.1336								-.1085	
140.000						-.1372								-.1085	
150.000						-.1408								-.1157	
160.000						-.1013								-.1157	
170.000						-.0708								-.0923	
180.000	-.0788	-.0749	-.0710	-.0672	-.0652	-.0654	-.0654	-.0690	-.0725	-.0743	-.0761	-.0797	-.0797	-.0833	-.0851

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1426		
70.000							-.1480	-.1354	-.1318
80.000							-.1426	-.1426	-.1318
90.000	-.0869	-.0995	-.1049	-.1139	-.1193	-.1157	-.1210	-.0959	-.1157
100.000	-.0564	-.0708	-.0779	-.0869	-.0887	-.1139			
110.000	-.0564	-.0654	-.0708	-.0618	-.0546	.0765			
120.000						.1623			
130.000						.0837			
140.000						-.0205			
150.000						.0047			
160.000						.0047			
170.000						-.0169			
180.000	-.0779	-.0833	-.0869	-.0797	-.0438	.2219			

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (2) = 2.950 ALPHA (7) = 20.000 RN/L = 2.5130 BETA = .0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1546	.0612	.1162												
70.000	.0967	.1180	.1020												
80.000	.0577	.0772	.0861												
90.000			.0759	.0364	-.0151	-.0346	-.0364	-.0346	-.0346	-.0346	-.0346	-.0343	-.0392	-.0372	-.0392
100.000						-.0417	-.0417	-.0399	-.0399	-.0399	-.0399	-.0382	-.0411	-.0392	-.0392
110.000						-.0541	-.0506	-.0488	-.0488	-.0506	-.0506	-.0528	-.0509	-.0509	-.0509
120.000						-.0524								-.1466	
130.000						-.0754								-.1466	
140.000						-.1180								-.1427	
150.000						-.1304								-.1310	
160.000						-.1269								-.1192	
170.000						-.1216								-.0938	
180.000						-.1216	-.1162	-.1127	-.1074	-.1003	-.0932	-.0899	-.0880	-.0860	-.0860

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0392	-.0392	-.0372	-.0392	-.0392	-.0411	-.0427	-.0463	-.0517	-.0588	-.0624	-.0731	-.0785	-.0856	-.0995
100.000	-.0392	-.0411	-.0411	-.0411	-.0411	-.0411	-.0427	-.0463	-.0427	-.0445	-.0463	-.0481	-.0517	-.0588	-.0654
110.000	-.0509	-.0509	-.0509	-.0528	-.0372	-.0528	-.0517	-.0445	-.0481	-.0517	-.0517	-.0499	-.0517	-.0588	-.0546
120.000						-.1329								-.1124	
130.000						-.1338								-.1124	
140.000						-.1338								-.1124	
150.000						-.1338								-.1195	
160.000						-.1177								-.1231	
170.000						-.0838								-.1070	
180.000	-.0821	-.0782	-.0724	-.0685	-.0685	-.0731	-.0785	-.0838	-.0892	-.0927	-.0892	-.0945	-.0945	-.0963	-.0959

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1444		
70.000							-.1480	-.1408	-.1336
80.000							-.1516	-.1498	-.1372
90.000	-.1049	-.1192	-.1246	-.1300	-.1336	-.1336	-.1390	-.1402	-.1246
100.000	-.0707	-.0851	-.0977	-.1049	-.1031	-.1300			
110.000	-.0582	-.0689	-.0779	-.0654	-.0707	.0191			
120.000						.1381			
130.000						.0802			
140.000						-.0204			
150.000						.0065			
160.000						-.0115			
170.000						-.0115			
180.000	-.0905	-.0941	-.0959	-.0654	-.0492	.1381			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DA.A FOR IA55/OA64 (ARC UPWT 1083) (044004)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (8) = 20.950 RN/L = 2.5130 BETA = .0000

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1507	.0519	.1159												
70.000	.0905	.1142	.1021												
80.000	.0485	.0709	.0848												
90.000			.0485	.0329	-.0138	-.0328	-.0328	-.0310	-.0310	-.0310	-.0310	-.0328	-.0332	-.0332	-.0351
100.000						-.0414	-.0397	-.0380	-.0380	-.0380	-.0362	-.0362	-.0370	-.0370	-.0332
110.000						-.0587	-.0501	-.0483	-.0466	-.0483	-.0483	-.0484	-.0484	-.0484	-.0446
120.000						-.0352								-.1414	
130.000						-.0743								-.1414	
140.000						-.1140								-.1433	
150.000						-.1261								-.1262	
160.000						-.1244								-.1148	
170.000						-.119?								-.0901	
180.000						-.1175	-.1123	-.1088	-.1019	-.0950	-.0898	-.0863	-.0844	-.0825	-.0806

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0351	-.0332	-.0332	-.0332	-.0332	-.0370	-.0417	-.0487	-.0557	-.0609	-.0679	-.0767	-.0837	-.0959	-.1110
100.000	-.0351	-.0370	-.0370	-.0370	-.0351	-.0370	-.0364	-.0382	-.0399	-.0399	-.0434	-.0487	-.0522	-.0592	-.0703
110.000	-.0485	-.0485	-.0485	-.0465	-.0332	-.0465	-.0469	-.0399	-.0399	-.0399	-.0434	-.0469	-.0522	-.0522	-.0579
120.000						-.1281								-.1047	
130.000						-.1309								-.1047	
140.000						-.1292								-.1134	
150.000						-.1292								-.1134	
160.000						-.1187								-.1187	
170.000						-.0907								-.1082	
180.000	-.0808	-.0730	-.0673	-.0655	-.0711	-.0802	-.0837	-.0907	-.0924	-.0959	-.0942	-.0959	-.0959	-.0994	-.1022

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1464		
70.000							-.1464	-.1429	-.1341
80.000							-.1535	-.1429	-.1394
90.000	-.1183	-.1252	-.1287	-.1358	-.1358	-.1376	-.1447	-.1287	-.1287
100.000	-.0774	-.0933	-.1039	-.1110	-.1093	-.1358			
110.000	-.0814	-.0774	-.0862	-.0705	-.0774	-.0030			
120.000						.1245			
130.000						.0749			
140.000						-.0260			
150.000						.0023			
160.000						-.0225			
170.000						-.0207			
180.000	-.0986	-.0986	-.0843	-.0721	-.0544	.0944			

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (3) = 4.000 ALPHA (1) = 7.990 RN/L = 3.4990 BETA = 1.9850

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1382	.1196	.0735												
70.000	.1372	.1000	.0764												
80.000	.1372	.1059	.0833												
90.000			.1000	.0829	-.0030	-.0177	-.0216	-.0226	-.0226	-.0236	-.0246	-.0246	-.0237	-.0237	-.0258
100.000						-.0157	-.0187	-.0197	-.0216	-.0236	-.0246	-.0265	-.0258	-.0258	-.0279
110.000						-.0138	-.0177	-.0197	-.0226	-.0265	-.0295	-.0290	-.0311	-.0311	-.0332
120.000						.0068								-.0480	
130.000						-.0157								-.0522	
140.000						-.0442								-.0512	
150.000						-.0501								-.0501	
160.000						-.0491								-.0470	
170.000						-.0501								-.0448	
180.000						-.0510	-.0501	-.0491	-.0491	-.0491	-.0481	-.0448	-.0448	-.0448	-.0438

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0258	-.0279	-.0279	-.0290	-.0300	-.0311	-.0360	-.0369	-.0379	-.0409	-.0389	-.0369	-.0399	-.0399	-.0400
100.000	-.0290	-.0300	-.0311	-.0311	-.0321	-.0332	-.0379	-.0389	-.0399	-.0399	-.0429	-.0439	-.0429	-.0439	-.0430
110.000	-.0343	-.0343	-.0353	-.0343	-.0205	-.0364	-.0409	-.0419	-.0399	.0448	-.0429	-.0468	-.0468	-.0478	-.0471
120.000						-.0480								-.0488	
130.000						-.0458								-.0439	
140.000						-.0399								-.0350	
150.000						-.0409								-.0330	
160.000						-.0429								-.0320	
170.000						-.0439								-.0330	
180.000	-.0438	-.0427	-.0417	-.0417	-.0406	-.0429	-.0439	-.0429	-.0399	-.0389	-.0369	-.0360	-.0350	-.0350	-.0340

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0662		
70.000							-.0531	-.0461	-.0420
80.000							-.0370	-.0280	-.0320
90.000	-.0380	-.0420	-.0441	-.0481	-.0491	-.0410	-.0169	-.0189	-.0270
100.000	-.0410	-.0410	-.0410	-.0420	-.0390	-.0441			
110.000	-.0491	-.0491	-.0510	-.0300	-.0099	.0273			
120.000						.0916			
130.000						.0826			
140.000						.0504			
150.000						.0565			
160.000						.0555			
170.000						.0796			
180.000	-.0300	-.0320	-.0320	-.0320	-.0089	.1037			

OA64 ORBITER ENTRY CONFIGURATION (R04004)

MACH (3) = 4.000 ALPHA (2) = 10.000 RN/L = 3.4990 BETA = 1.9850

SECTION : 1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1288	.1162	.0704												
70.000	.1230	.0948	.0704												
80.000	.1162	.0938	.0763												
90.000			.0909	.0490	-.0026	-.0172	-.0221	-.0231	-.0240	-.0240	-.0250	-.0250	-.0293	-.0304	-.0326
100.000						-.0192	-.0240	-.0250	-.0260	-.0270	-.0279	-.0279	-.0315	-.0326	-.0347
110.000						-.0153	-.0201	-.0211	-.0231	-.0270	-.0299	-.0347	-.0358	-.0368	-.0379
120.000						-.0007								-.0582	
130.000						-.0231								-.0593	
140.000						-.0513								-.0582	
150.000						-.0552								-.0582	
160.000						-.0542								-.0550	
170.000						-.0542								-.0540	
180.000						-.0552	-.0552	-.0533	-.0542	-.0542	-.0533	-.0550	-.0550	-.0540	-.0529

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0358	-.0358	-.0358	-.0368	-.0379	-.0379	-.0386	-.0396	-.0406	-.0415	-.0435	-.0435	-.0445	-.0435	-.0432
100.000	-.0358	-.0368	-.0379	-.0400	-.0411	-.0422	-.0435	-.0435	-.0435	-.0415	-.0445	-.0445	-.0455	-.0455	-.0442
110.000	-.0390	-.0411	-.0422	-.0443	-.0304	-.0486	-.0515	-.0515	-.0505	-.0495	-.0445	-.0485	-.0495	-.0495	-.0482
120.000						-.0593								-.0545	
130.000						-.0575								-.0575	
140.000						-.0475								-.0485	
150.000						-.0435								-.0415	
160.000						-.0445								-.0376	
170.000						-.0445								-.0376	
180.000	-.0518	-.0518	-.0497	-.0475	-.0485	-.0465	-.0455	-.0435	-.0425	-.0415	-.0406	-.0396	-.0396	-.0396	-.0392

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0733		
70.000							-.0632	-.0632	-.0632
80.000							-.0462	-.0452	-.0432
90.000	-.0392	-.0432	-.0452	-.0482	-.0472	-.0422	-.0352	-.0292	-.0282
100.000	-.0422	-.0432	-.0422	-.0402	-.0362	-.0392			
110.000	-.0472	-.0482	-.0402	-.0292	-.0192	.0229			
120.000						.1221			
130.000						.0730			
140.000						.0119			
150.000						.0399			
160.000						.0469			
170.000						.0610			
180.000	-.0362	-.0392	-.0392	-.0382	-.0202	.1130			

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (3) = 4.000 ALPHA (3) = 12.010 RN/L = 3.4990 BETA = 1.9850

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2050	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1250	.1033	.0687												
70.000	.1112	.0904	.0658												
80.000	.0993	.0835	.0687												
90.000			.0606	.0440	-.0044	-.0202	-.0231	-.0251	-.0261	-.0271	-.0281	-.0300	-.0315	-.0336	-.0358
100.000						-.0211	-.0241	-.0261	-.0281	-.0281	-.0300	-.0310	-.0336	-.0358	-.0379
110.000						-.0192	-.0231	-.0251	-.0231	-.0320	-.0340	-.0368	-.0390	-.0411	-.0443
120.000						-.0113								-.0615	
130.000						-.0310								-.0615	
140.000						-.0587								-.0615	
150.000						-.0626								-.0604	
160.000						-.0616								-.0572	
170.000						-.0616								-.0372	
180.000						-.0616	-.0616	-.0606	-.0597	-.0587	-.0577	-.0582	-.0572	-.0572	-.0561

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0358	-.0368	-.0368	-.0368	-.0368	-.0379	-.0406	-.0406	-.0425	-.0425	-.0435	-.0435	-.0435	-.0425	-.0432
100.000	-.0400	-.0411	-.0411	-.0390	-.0400	-.0400	-.0415	-.0415	-.0435	-.0425	-.0445	-.0445	-.0455	-.0455	-.0442
110.000	-.0465	-.0475	-.0475	-.0465	-.0304	-.0465	-.0465	-.0475	-.0425	-.0475	-.0445	-.0495	-.0505	-.0505	-.0492
120.000						-.0647								-.0585	
130.000						-.0684								-.0604	
140.000						-.0555								-.0624	
150.000						-.0485								-.0495	
160.000						-.0435								-.0445	
170.000						-.0445								-.0425	
180.000	-.0340	-.0329	-.0318	-.0497	-.0486	-.0485	-.0465	-.0445	-.0425	-.0425	-.0415	-.0415	-.0425	-.0425	-.0432

X/L	.7250	.7370	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0773		
70.000							-.0743	-.0753	-.0693
80.000							-.0592	-.0622	-.0642
90.000	-.0422	-.0472	-.0502	-.0512	-.0472	-.0452	-.0452	-.0462	-.0382
100.000	-.0432	-.0442	-.0462	-.0382	-.0352	-.0432			
110.000	-.0482	-.0482	-.0392	-.0272	-.0282	.0059			
120.000						.1411			
130.000						.0690			
140.000						-.0272			
150.000						.0579			
160.000						.0409			
170.000						.0409			
180.000	-.0412	-.0442	-.0472	-.0452	-.0272	.0870			

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (3) = 4.000 ALPHA (4) = 14.000 RN/L = 3.4990 BETA = 1.9850

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1242	.0885	.0716												
70.000	.1044	.0875	.0656												
80.000	.0845	.0766	.0656												
90.000			.0716	.0418	-.0039	-.0198	-.0208	-.0237	-.0247	-.0267	-.0277	-.0287	-.0337	-.0337	-.0358
100.000						-.0186	-.0208	-.0227	-.0257	-.0287	-.0297	-.0347	-.0358	-.0369	-.0389
110.000						-.0168	-.0208	-.0247	-.0297	-.0347	-.0406	-.0412	-.0423	-.0433	-.0433
120.000						-.0168								-.0690	
130.000						-.0327								-.0647	
140.000						-.0605								-.0626	
150.000						-.0625								-.0615	
160.000						-.0605								-.0583	
170.000						-.0615								-.0583	
180.000						-.0615	-.0615	-.0605	-.0595	-.0595	-.0585	-.0604	-.0594	-.0594	-.0572

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0358	-.0358	-.0358	-.0358	-.0369	-.0380	-.0396	-.0406	-.0416	-.0426	-.0426	-.0426	-.0426	-.0436	-.0478
100.000	-.0380	-.0330	-.0380	-.0369	-.0369	-.0380	-.0406	-.0416	-.0426	-.0426	-.0436	-.0436	-.0436	-.0446	-.0448
110.000	-.0444	-.0433	-.0433	-.0423	-.0284	-.0423	-.0436	-.0456	-.0426	-.0476	-.0436	-.0486	-.0486	-.0496	-.0478
120.000						-.0690								-.0595	
130.000						-.0724								-.0615	
140.000						-.0674								-.0625	
150.000						-.0575								-.0605	
160.000						-.0506								-.0506	
170.000						-.0476								-.0486	
180.000	-.0581	-.0540	-.0529	-.0519	-.0497	-.0486	-.0436	-.0456	-.0446	-.0436	-.0436	-.0446	-.0476	-.0506	-.0519

X/L	.7290	.7470	.7870	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0802		
70.000							-.0842	-.0822	-.0772
80.000							-.0741	-.0782	-.0772
90.000	-.0458	-.0529	-.0549	-.0590	-.0620	-.0569	-.0579	-.0610	-.0509
100.000	-.0418	-.0458	-.0468	-.0499	-.0468	-.0509			
110.000	-.0488	-.0488	-.0478	-.0438	-.0206	.0462			
120.000						.1240			
130.000						.0957			
140.000						-.0246			
150.000						.0331			
160.000						.0118			
170.000						.0128			
180.000	-.0509	-.0349	-.0589	-.0549	-.0387	.0765			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (R04004)

OA64 ORBITER ENTRY CONFIGURATION

MACH (5) = 4.000 ALPHA (5) = 16.010 RN/L = 3.4990 BETA = 1.9850

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1171	.0729	.0729												
70.000	.0898	.0837	.0680												
80.000	.0689	.0689	.0601												
90.000			.0620	.0335	-.0077	-.0225	-.0254	-.0264	-.0274	-.0293	-.0303	-.0313	-.0324	-.0335	-.0346
100.000						-.0234	-.0254	-.0264	-.0284	-.0303	-.0323	-.0333	-.0356	-.0356	-.0356
110.000						-.0215	-.0254	-.0293	-.0323	-.0362	-.0382	-.0339	-.0410	-.0410	-.0410
120.000						-.0215								-.0753	
130.000						-.0343								-.0743	
140.000						-.0657								-.0657	
150.000						-.0677								-.0646	
160.000						-.0657								-.0592	
170.000						-.0647								-.0571	
180.000						-.0647	-.0647	-.0637	-.0628	-.0628	-.0618	-.0614	-.0605	-.0592	-.0571

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0348	-.0358	-.0358	-.0358	-.0358	-.0358	-.0403	-.0413	-.0403	-.0433	-.0433	-.0433	-.0453	-.0483	-.0530
100.000	-.0358	-.0358	-.0358	-.0358	-.0367	-.0378	-.0423	-.0423	-.0423	-.0433	-.0433	-.0433	-.0423	-.0433	-.0429
110.000	-.0410	-.0410	-.0410	-.0410	-.0281	-.0410	-.0453	-.0453	-.0423	-.0423	-.0433	-.0483	-.0473	-.0473	-.0450
120.000						-.0721								-.0633	
130.000						-.0763								-.0633	
140.000						-.0783								-.0633	
150.000						-.0663								-.0673	
160.000						-.0553								-.0623	
170.000						-.0523								-.0583	
180.000	-.0371	-.0371	-.0360	-.0339	-.0328	-.0553	-.0543	-.0523	-.0523	-.0503	-.0503	-.0533	-.0573	-.0613	-.0611

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0812		
70.000							-.0842	-.0812	-.0792
80.000							-.0822	-.0832	-.0802
90.000	-.0580	-.0611	-.0651	-.0701	-.0722	-.0701	-.0712	-.0681	-.0641
100.000	-.0419	-.0480	-.0490	-.0540	-.0560	-.0621			
110.000	-.0429	-.0470	-.0480	-.0480	-.0319	.0558			
120.000						.1122			
130.000						.0729			
140.000						-.0218			
150.000						.0074			
160.000						-.0127			
170.000						-.0157			
180.000	-.0601	-.0621	-.0641	-.0580	-.0450	.0699			

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (3) = 4.000 ALPHA (6) = 18.010 RN/L = 3.4990 BETA = 1.9850

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1150	.0997	.0755												
90.000	.0793	.0814	.0656												
80.000	.0558	.0597	.0577												
90.000			.0479	.0262	-.0105	-.0251	-.0271	-.0281	-.0291	-.0321	-.0330	-.0311	-.0343	-.0332	-.0332
100.000						-.0271	-.0291	-.0301	-.0321	-.0340	-.0350	-.0330	-.0354	-.0311	-.0365
110.000						-.0281	-.0301	-.0330	-.0360	-.0399	-.0399	-.0397	-.0408	-.0408	-.0408
120.000						.0271								-.0785	
130.000						-.0359								-.0785	
140.000						-.0668								-.0742	
150.000						-.0705								-.0677	
160.000						-.0686								-.0602	
170.000						-.0686								-.0569	
180.000						-.0686	-.0666	-.0666	-.0666	-.0666	-.0646	-.0613	-.0602	-.0591	-.0591

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0332	-.0343	-.0332	-.0332	-.0343	-.0343	-.0336	-.0306	-.0396	-.0416	-.0456	-.0505	-.0525	-.0565	-.0634
100.000	-.0354	-.0354	-.0354	-.0354	-.0365	-.0365	-.0376	-.0376	-.0396	-.0406	-.0376	-.0396	-.0406	-.0416	-.0424
110.000	-.0408	-.0408	-.0386	-.0408	-.0278	-.0419	-.0426	-.0426	-.0396	-.0416	-.0436	-.0416	-.0416	-.0426	-.0394
120.000						-.0720								-.0644	
130.000						-.0734								-.0654	
140.000						-.0744								-.0684	
150.000						-.0734								-.0694	
160.000						-.0605								-.0704	
170.000						-.0525								-.0664	
180.000	-.0591	-.0591	-.0580	-.0580	-.0580	-.0595	-.0595	-.0585	-.0595	-.0575	-.0595	-.0605	-.0644	-.0684	-.0683

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0783		
70.000							-.0813	-.0793	-.0783
80.000							-.0833	-.0803	-.0783
90.000	-.0883	-.0713	-.0743	-.0773	-.0773	-.0773	-.0803	-.0803	-.0733
100.000	-.0454	-.0524	-.0574	-.0604	-.0594	-.0683			
110.000	-.0394	-.0454	-.0474	-.0394	-.0374	.0134			
120.000						.1052			
130.000						.0753			
140.000						-.0145			
150.000						.0045			
160.000						-.0235			
170.000						-.0205			
180.000	-.0853	-.0844	-.0564	-.0494	-.0444	.0334			

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (5) = 4.000 ALPHA (7) = 20.000 RN/L = 2.4990 BETA = 1.9850

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1152	.0473	.0773												
70.000	.0703	.0803	.0683												
80.000	.0444	.0535	.0565												
90.000			.0354	.0214	-.0115	-.0245	-.0275	-.0284	-.0284	-.0294	-.0294	-.0324	-.0345	-.0335	-.0345
100.000						-.0294	-.0314	-.0324	-.0314	-.0324	-.0324	-.0354	-.0367	-.0389	-.0378
110.000						-.0344	-.0364	-.0374	-.0364	-.0384	-.0394	-.0422	-.0422	-.0444	-.0422
120.000						-.0344								-.0849	
130.000						-.0484								-.0849	
140.000						-.0644								-.0860	
150.000						-.0723								-.0729	
160.000						-.0693								-.0663	
170.000						-.0693								-.0608	
180.000						-.0693	-.0693	-.0683	-.0663	-.0653	-.0644	-.0663	-.0641	-.0652	-.0652

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0335	-.0345	-.0345	-.0335	-.0335	-.0367	-.0422	-.0422	-.0442	-.0525	-.0543	-.0643	-.0725	-.0753	-.0842
100.000	-.0367	-.0378	-.0378	-.0378	-.0367	-.0356	-.0342	-.0382	-.0392	-.0392	-.0402	-.0442	-.0482	-.0543	-.0609
110.000	-.0433	-.0422	-.0422	-.0433	-.0291	-.0422	-.0422	-.0422	-.0392	-.0392	-.0402	-.0402	-.0412	-.0432	-.0477
120.000						-.0772								-.0683	
130.000						-.0773								-.0693	
140.000						-.0773								-.0733	
150.000						-.0783								-.0733	
160.000						-.0693								-.0743	
170.000						-.0573								-.0743	
180.000	-.0852	-.0841	-.0852	-.0852	-.0852	-.0853	-.0863	-.0883	-.0873	-.0873	-.0703	-.0733	-.0743	-.0773	-.0781

X/L	.7290	.7470	.7870	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0842		
70.000							-.0873	-.0852	-.0812
80.000							-.0883	-.0852	-.0822
90.000	-.0832	-.0862	-.0883	-.0893	-.0883	-.0893	-.0903	-.0832	-.0842
100.000	-.0629	-.0710	-.0761	-.0781	-.0781	-.0812			
110.000	-.0497	-.0548	-.0578	-.0477	-.0527	-.0243			
120.000						.0772			
130.000						.0590			
140.000						-.0243			
150.000						-.0172			
160.000						-.0345			
170.000						-.0273			
180.000	-.0730	-.0680	-.0619	-.0598	-.0537	-.0020			

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (S) = 4.000 ALPHA (S) = 20.970 RN/L = 3.4990 BETA = 1.9850

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1112	.0394	.0765												
70.000	.0653	.0775	.0865												
80.000	.0374	.0464	.0543												
90.000			.0294	.0184	-.0135	-.0265	-.0284	-.0284	-.0284	-.0294	-.0304	-.0324	-.0306	-.0306	-.0306
100.000						-.0324	-.0324	-.0324	-.0324	-.0334	-.0334	-.0344	-.0350	-.0371	-.0359
110.000						-.0404	-.0384	-.0384	-.0384	-.0394	-.0404	-.0393	-.0404	-.0404	-.0404
120.000						-.0404								-.0839	
130.000						-.0534								-.0849	
140.000						-.0673								-.0752	
150.000						-.0753								-.0643	
160.000						-.0733								-.0589	
170.000						-.0723									
180.000						-.0723	-.0713	-.0693	-.0683	-.0663	-.0653	-.0643	-.0632	-.0643	-.0643

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0295	-.0295	-.0308	-.0317	-.0328	-.0371	-.0431	-.0481	-.0521	-.0622	-.0702	-.0772	-.0823	-.0843	-.0842
100.000	-.0339	-.0339	-.0339	-.0339	-.0328	-.0317	-.0350	-.0371	-.0391	-.0391	-.0411	-.0451	-.0501	-.0571	-.0621
110.000	-.0393	-.0393	-.0393	-.0393	-.0230	-.0393	-.0411	-.0371	-.0391	-.0391	-.0411	-.0411	-.0421	-.0441	-.0449
120.000						-.0752								-.0692	
130.000						-.0782								-.0692	
140.000						-.0782								-.0752	
150.000						-.0792								-.0752	
160.000						-.0722								-.0762	
170.000						-.0602								-.0772	
180.000	-.0843	-.0843	-.0843	-.0843	-.0843	-.0672	-.0692	-.0702	-.0672	-.0732	-.0752	-.0772	-.0792	-.0792	-.0742

X/L	.7290	.7470	.7670	.78..	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0822		
70.000							-.0842	-.0832	-.0792
80.000							-.0863	-.0822	-.0792
90.000	-.0833	-.0873	-.0883	-.0883	-.0883	-.0883	-.0883	-.0822	-.0812
100.000	-.0891	-.0782	-.0802	-.0832	-.0822	-.0853			
110.000	-.0459	-.0540	-.0590	-.0550	-.0601	-.0510			
120.000						.0771			
130.000						.0508			
140.000						-.0278			
150.000						-.0228			
160.000						-.0318			
170.000						-.0238			
180.000	-.0701	-.0851	-.0821	-.0580	-.0530	-.0056			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4004)

OA64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (1) = 8.010 RN/L = 3.4985 BETA = .0150

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1554	.1387	.0834												
70.000	.1331	.1158	.0854												
80.000	.1463	.1174	.0877												
90.000			.1029	.0834	.0093	-.0074	-.0112	-.0142	-.0165	-.0188	-.0203	-.0211	-.0230	-.0237	-.0257
100.000						-.0089	-.0127	-.0158	-.0188	-.0211	-.0226	-.0241	-.0257	-.0263	-.0277
110.000						-.0082	-.0135	-.0158	-.0188	-.0234	-.0249	-.0263	-.0283	-.0297	-.0317
120.000						.0101								-.0491	
130.000						-.0089								-.0538	
140.000						-.0416								-.0525	
150.000						-.0416								-.0525	
160.000						-.0470								-.0518	
170.000						-.0462								-.0498	
180.000						-.0470	-.0477	-.0477	-.0485	-.0485	-.0485	-.0491	-.0491	-.0491	-.0491

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0270	-.0283	-.0290	-.0290	-.0317	-.0317	-.0339	-.0339	-.0339	-.0346	-.0339	-.0346	-.0346	-.0354	-.0319
100.000	-.0290	-.0290	-.0304	-.0310	-.0324	-.0344	-.0370	-.0385	-.0393	-.0385	-.0370	-.0378	-.0346	-.0378	-.0347
110.000	-.0317	-.0337	-.0350	-.0350	-.0257	-.0384	-.0417	-.0424	-.0448	-.0448	-.0456	-.0440	-.0417	-.0424	-.0384
120.000						-.0545								-.0518	
130.000						-.0534								-.0518	
140.000						-.0518								-.0518	
150.000						-.0495								-.0448	
160.000						-.0487								-.0409	
170.000						-.0479								-.0378	
180.000	-.0491	-.0484	-.0471	-.0471	-.0458	-.0479	-.0479	-.0471	-.0464	-.0448	-.0434	-.0409	-.0385	-.0378	-.0338

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.0558		
60.000							-.0411	-.0375	-.0301
70.000							-.0301	-.0301	-.0283
80.000							-.0237	-.0218	-.0200
90.000	-.0329	-.0338	-.0375	-.0384	-.0375	-.0283			
100.000	-.0347	-.0347	-.0365	-.0356	-.0283	-.0283			
110.000	-.0384	-.0411	-.0411	-.0319	-.0218	.0140			
120.000						.1335			
130.000						.1179			
140.000						-.0191			
150.000						-.0163			
160.000						.0251			
170.000						.0214			
180.000	-.0301	-.0329	-.0338	-.0329	-.0145	.0968			

DATE 25 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (R04004)

OA64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (2) = 10.000 RN/L = 3.4985 BETA = .0150

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1522	.1313	.0889												
70.000	.1417	.1142	.0366												
80.000	.1291	.1105	.0866												
90.000			.0956	.0620	.0129	-.0028	-.0072	-.0087	-.0117	-.0132	-.0154	-.0169	-.0205	-.0218	-.0244
100.000						-.0028	-.0065	-.0095	-.0124	-.0154	-.0177	-.0192	-.0231	-.0238	-.0264
110.000						-.0013	-.0065	-.0110	-.0154	-.0192	-.0221	-.0264	-.0284	-.0290	-.0310
120.000						.0017								-.0475	
130.000						-.0102								-.0501	
140.000						-.0400								-.0501	
150.000						-.0400								-.0501	
160.000						-.0445								-.0495	
170.000						-.0445								-.0481	
180.000						-.0445	-.0452	-.0452	-.0460	-.0460	-.0467	-.0481	-.0475	-.0481	-.0468

X/L	.4900	.4880	.4863	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0251	-.0264	-.0264	-.0271	-.0271	-.0264	-.0264	-.0271	-.0286	-.0286	-.0294	-.0302	-.0302	-.0302	-.0266
100.000	-.0277	-.0290	-.0290	-.0304	-.0304	-.0304	-.0286	-.0302	-.0294	-.0294	-.0302	-.0309	-.0294	-.0324	-.0293
110.000	-.0325	-.0337	-.0350	-.0356	-.0165	-.0363	-.0363	-.0363	-.0347	-.0347	-.0347	-.0355	-.0355	-.0363	-.0347
120.000						-.0514								-.0492	
130.000						-.0510								-.0492	
140.000						-.0507								-.0492	
150.000						-.0462								-.0484	
160.000						-.0439								-.0418	
170.000						-.0416								-.0385	
180.000	-.0483	-.0495	-.0442	-.0435	-.0422	-.0416	-.0408	-.0393	-.0370	-.0363	-.0363	-.0355	-.0363	-.0363	-.0347

X/L	.7290	.7470	.7870	.7850	.8030	.8290	.9620	.9000	.9400
PHI									
80.000							-.0544		
70.000							-.0455	-.0448	-.0401
80.000							-.0275	-.0275	-.0275
90.000	-.0297	-.0275	-.0302	-.0311	-.0329	-.0239	-.0186	-.0204	-.0186
100.000	-.0295	-.0293	-.0297	-.0284	-.0248	-.0221			
110.000	-.0338	-.0347	-.0347	-.0293	-.0132	.0469			
120.000						.1320			
130.000						.0997			
140.000						-.0266			
150.000						-.0293			
160.000						.0110			
170.000						.0038			
180.000	-.0329	-.0338	-.0356	-.0311	-.0186	.0836			

OA84 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (4) = 4.990 ALPHA (3) = 12.010 RN/L = 3.4985 BETA = .0130

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0890	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1443	.1079	.0848												
70.000	.1257	.1056	.0801												
80.000	.1079	.0964	.0770												
90.000			.0794	.0492	.0029	-.0134	-.0172	-.0203	-.0219	-.0242	-.0265	-.0273	-.0299	-.0312	-.0326
100.000						-.0141	-.0165	-.0195	-.0226	-.0257	-.0280	-.0296	-.0319	-.0333	-.0353
110.000						-.0110	-.0165	-.0219	-.0265	-.0304	-.0335	-.0353	-.0387	-.0387	-.0401
120.000						-.0110								-.0638	
130.000						-.0242								-.0624	
140.000						-.0551								-.0624	
150.000						-.0551								-.0597	
160.000						-.0582								-.0597	
170.000						-.0574								-.0590	
180.000						-.0582	-.0582	-.0582	-.0590	-.0590	-.0590	-.0583	-.0583	-.0583	-.0570

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0328	-.0333	-.0333	-.0326	-.0326	-.0333	-.0339	-.0339	-.0347	-.0347	-.0362	-.0354	-.0354	-.0347	-.0344
100.000	-.0353	-.0353	-.0353	-.0353	-.0353	-.0353	-.0347	-.0347	-.0354	-.0362	-.0370	-.0354	-.0354	-.0378	-.0372
110.000	-.0414	-.0414	-.0414	-.0414	-.0265	-.0407	-.0393	-.0401	-.0401	-.0401	-.0409	-.0417	-.0409	-.0425	-.0418
120.000						-.0665								-.0596	
130.000						-.0651								-.0604	
140.000						-.0674								-.0596	
150.000						-.0596								-.0596	
160.000						-.0565								-.0557	
170.000						-.0516								-.0503	
180.000	-.0583	-.0550	-.0529	-.0516	-.0489	-.0503	-.0487	-.0487	-.0471	-.0471	-.0471	-.0487	-.0487	-.0495	-.0483

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0659		
70.000							-.0631	-.0631	-.0604
80.000							-.0474	-.0502	-.0548
90.000	-.0319	-.0372	-.0400	-.0418	-.0428	-.0344	-.0307	-.0335	-.0279
100.000	-.0335	-.0372	-.0383	-.0372	-.0353	-.0335			
110.000	-.0400	-.0428	-.0418	-.0391	-.0198	.0517			
120.000						.1221			
130.000						.0666			
140.000						-.0316			
150.000						-.0279			
160.000						-.0168			
170.000						-.0269			
180.000	-.0448	-.0474	-.0474	-.0418	-.0316	.1101			

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (4) = 4.500 ALPHA (4) = 14.010 RN/L = 3.4985 BETA = .0150

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1400	.0933	.0879												
70.000	.1139	.1017	.0803												
80.000	.0917	.0887	.0741												
90.000			.0703	.0443	.0014	-.0139	-.0177	-.0193	-.0216	-.0231	-.0246	-.0261	-.0269	-.0276	-.0290
100.000						-.0139	-.0177	-.0200	-.0223	-.0246	-.0269	-.0277	-.0296	-.0303	-.0310
110.000						-.0131	-.0177	-.0216	-.0254	-.0292	-.0315	-.0323	-.0343	-.0357	-.0357
120.000						-.0147								-.0672	
130.000						-.0269								-.0638	
140.000						-.0360								-.0612	
150.000						-.0560								-.0603	
160.000						-.0591								-.0598	
170.000						-.0575								-.0565	
180.000						-.0583	-.0583	-.0583	-.0575	-.0575	-.0575	-.0565	-.0558	-.0558	-.0538

X/L	.4300	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0290	-.0290	-.0283	-.0290	-.0290	-.0290	-.0301	-.0309	-.0316	-.0324	-.0324	-.0324	-.0332	-.0316	-.0337
100.000	-.0316	-.0310	-.0303	-.0296	-.0296	-.0303	-.0316	-.0324	-.0332	-.0332	-.0340	-.0348	-.0332	-.0340	-.0337
110.000	-.0370	-.0370	-.0357	-.0357	-.0149	-.0357	-.0348	-.0363	-.0371	-.0379	-.0379	-.0379	-.0379	-.0386	-.0374
120.000						-.0665								-.0612	
130.000						-.0674								-.0612	
140.000						-.0690								-.0612	
150.000						-.0713								-.0628	
160.000						-.0612								-.0612	
170.000						-.0495								-.0581	
180.000	-.0531	-.0518	-.0498	-.0464	-.0477	-.0480	-.0479	-.0480	-.0480	-.0495	-.0519	-.0526	-.0534	-.0518	-.0540

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.8910	.9400
PHI									
80.000							-.0650		
70.000							-.0696	-.0	-.0632
80.000							-.0595	-.06	.0659
90.000	-.0328	-.0383	-.0420	-.0457	-.0466	-.0411	-.0392	-.0429	.0282
100.000	-.0319	-.0348	-.0355	-.0374	-.0355	-.0355			
110.000	-.0374	-.0392	-.0392	-.0374	-.0190	.0621			
120.000						.1238			
130.000						.0547			
140.000						-.0337			
150.000						-.0355			
160.000						-.0355			
170.000						-.0475			
180.000	-.0521	-.0530	-.0530	-.0484	-.0374	.1036			

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (4) = 4.500 ALPHA (5) = 16.000 RN/L = 3.4985 BETA = .0150

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1393	.0828	.0904												
90.000	.1049	.1003	.0821												
80.000	.0798	.0821	.0745												
90.000			.0623	.0403	.0024	-.0128	-.0166	-.0174	-.0189	-.0204	-.0212	-.0219	-.0222	-.0222	-.0235
100.000						-.0151	-.0182	-.0189	-.0204	-.0227	-.0242	-.0242	-.0249	-.0255	-.0255
110.000						-.0166	-.0189	-.0219	-.0242	-.0273	-.0288	-.0288	-.0302	-.0315	-.0315
120.000						-.0189								-.0659	
130.000						-.0318								-.0646	
140.000						-.0546								-.0619	
150.000						-.0546								-.0606	
160.000						-.0584								-.0586	
170.000						-.0576								-.0533	
180.000						-.0576	-.0569	-.0569	-.0561	-.0561	-.0554	-.0527	-.0520	-.0513	-.0494

X/L	.4900	.4380	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0229	-.0235	-.0235	-.0235	-.0242	-.0235	-.0258	-.0246	-.0238	-.0253	-.0253	-.0253	-.0269	-.0269	-.0332
100.000	-.0255	-.0255	-.0249	-.0249	-.0255	-.0255	-.0261	-.0261	-.0261	-.0269	-.0269	-.0276	-.0269	-.0269	-.0259
110.000	-.0315	-.0308	-.0295	-.0295	-.0103	-.0302	-.0307	-.0307	-.0315	-.0315	-.0315	-.0315	-.0307	-.0322	-.0313
120.000						-.0633								-.0583	
130.000						-.0636								-.0575	
140.000						-.0652								-.0575	
150.000						-.0652								-.0575	
160.000						-.0636								-.0583	
170.000						-.0460								-.0575	
180.000	-.0480	-.0474	-.0454	-.0447	-.0447	-.0437	-.0453	-.0468	-.0491	-.0514	-.0537	-.0545	-.0560	-.0568	-.0560

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0633		
70.000							-.0678	-.0651	-.0623
80.000							-.0633	-.0651	-.0651
90.000	-.0359	-.0432	-.0439	-.0498	-.0532	-.0496	-.0514	-.0560	-.0432
100.000	-.0249	-.0313	-.0313	-.0341	-.0359	-.0395			
110.000	-.0295	-.0322	-.0313	-.0315	-.0149	.0781			
120.000						.1274			
130.000						.0498			
140.000						-.0414			
150.000						-.0377			
160.000						-.0377			
170.000						-.0450			
180.000	-.0941	-.0329	-.0523	-.0477	-.0386	.0626			

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

OA64 ORBITER ENTRY CONFIGURATION

(R04004)

MACH (4) = 4.500 ALPHA (6) = 18.000 RN/L = 3.4985 BETA = .0150

SECTION (1)FUSELAGE

DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1321	.0812	.0889												
70.000	.0905	.0935	.0781												
80.000	.0812	.0889	.0681												
90.000			.0489	.0319	-.0043	-.0189	-.0189	-.0197	-.0189	-.0236	-.0243	-.0259	-.0280	-.0286	-.0280
100.000						-.0228	-.0220	-.0243	-.0251	-.0266	-.0282	-.0289	-.0307	-.0313	-.0313
110.000						-.0289	-.0259	-.0289	-.0289	-.0320	-.0343	-.0361	-.0368	-.0361	-.0368
120.000						-.0320								-.0753	
130.000						-.0451								-.0746	
140.000						-.0575								-.0739	
150.000						-.0644								-.0719	
160.000						-.0628								-.0692	
170.000						-.0628								-.0645	
180.000						-.0628	-.0621	-.0644	-.0613	-.0605	-.0605	-.0591	-.0584	-.0597	-.0611

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0280	-.0280	-.0280	-.0280	-.0280	-.0280	-.0254	-.0278	-.0286	-.0278	-.0324	-.0340	-.0356	-.0402	-.0528
100.000	-.0300	-.0307	-.0307	-.0307	-.0307	-.0307	-.0293	-.0293	-.0293	-.0286	-.0286	-.0293	-.0293	-.0293	-.0351
110.000	-.0368	-.0361	-.0347	-.0347	-.0219	-.0361	-.0340	-.0348	-.0348	-.0348	-.0340	-.0340	-.0332	-.0332	-.0351
120.000						-.0719								-.0635	
130.000						-.0713								-.0535	
140.000						-.0713								-.0535	
150.000						-.0721								-.0643	
160.000						-.0729								-.0643	
170.000						-.0581								-.0651	
180.000	-.0584	-.0557	-.0557	-.0550	-.0537	-.0534	-.0542	-.0573	-.0604	-.0620	-.0643	-.0659	-.0667	-.0667	-.0668

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0715		
70.000							-.0752	-.0733	-.0724
80.000							-.0761	-.0761	-.0743
90.000	-.0547	-.0812	-.0659	-.0696	-.0705	-.0687	-.0715	-.0733	-.0631
100.000	-.0389	-.0425	-.0463	-.0509	-.0537	-.0677			
110.000	-.0323	-.0379	-.0397	-.0407	-.0285	.0555			
120.000						.1246			
130.000						.0433			
140.000						-.0565			
150.000						-.0528			
160.000						-.0509			
170.000						-.0565			
180.000	-.0640	-.0640	-.0621	-.0575	-.0537	.0293			

OA64 ORBITER ENTRY CONFIGURATION (RQ4004)

MACH (4) = 4.500 ALPHA (7) = 19.990 RN/L = 3.4985 BETA = .0150

SECTION (1)F1 LAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1315	.0308	.0923												
70.000	.0823	.0946	.0808												
80.000	.0901	.0616	.0677												
90.000			.0424	.0309	-.0022	-.0160	-.0175	-.0191	-.0198	-.0206	-.0221	-.0229	-.0234	-.0227	-.0227
100.000						-.0221	-.0237	-.0237	-.0244	-.0252	-.0260	-.0260	-.0267	-.0274	-.0267
110.000						-.0344	-.0306	-.0306	-.0306	-.0321	.0329	-.0328	-.0328	-.0328	-.0328
120.000						-.0360								-.0753	
130.000						-.0483								-.0746	
140.000						-.0621								-.0753	
150.000						-.0667								-.0746	
160.000						-.0659								-.0705	
170.000						-.0644								-.0604	
180.000						-.0636	-.0636	-.0629	-.0613	-.0606	-.0590	-.0571	-.0564	-.0564	-.0564

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0227	-.0227	-.0227	-.0220	-.0213	-.0227	-.0246	-.0269	-.0300	-.0316	-.0324	-.0394	-.0487	-.0550	-.0613
100.000	-.0280	-.0280	-.0260	-.0260	-.0234	-.0254	-.0246	-.0246	-.0261	-.0254	-.0269	-.0277	-.0300	-.0370	-.0438
110.000	-.0328	-.0314	-.0308	-.0314	-.0132	-.0314	-.0300	-.0300	-.0308	-.0300	-.0300	-.0285	-.0277	-.0285	-.0327
120.000						-.0712								-.0667	
130.000						-.0705								-.0659	
140.000						-.0713								-.0667	
150.000						-.0713								-.0667	
160.000						-.0721								-.0667	
170.000						-.0628								-.0674	
180.000	-.0571	-.0571	-.0564	-.0550	-.0537	-.0573	-.0596	-.0635	-.0667	-.0682	-.0698	-.0674	-.0690	-.0690	-.0650

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0705		
70.000							-.0724	-.0715	-.0659
80.000							-.0733	-.0715	-.0659
90.000	-.0832	-.0839	-.0887	-.0715	-.0724	-.0705	-.0742	-.0659	-.0650
100.000	-.0429	-.0502	-.0539	-.0576	-.0613	-.0669			
110.000	-.0348	-.0382	-.0401	-.0410	-.0290	.0300			
120.000						.1048			
130.000						.0494			
140.000						-.0512			
150.000						-.0484			
160.000						-.0475			
170.000						-.0466			
180.000	-.0822	-.0995	-.0967	-.0949	-.0921	-.0909			

OA64 ORBITER ENTRY CONFIGURATION (R04004)

MACH (4. = 4.500 ALPHA (8) = 20.960 RN/L = 3.4985 BETA = .0150

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1308	.0479	.0931												
70.000	.0798	.0939	.0818												
60.000	.0464	.0584	.0682												
90.000			.0403	.0320	.0004	-.0132	-.0155	-.0155	-.0155	-.0170	-.0170	-.0193	-.0173	-.0173	-.0179
100.000						-.0193	-.0208	-.0208	-.0200	-.0208	-.0208	-.0215	-.0213	-.0233	-.0213
110.000						-.0343	-.0298	-.0276	-.0268	-.0268	-.0291	-.0273	-.0279	-.0295	-.0279
120.000						-.0374								-.0719	
130.000						-.0479								-.0705	
140.000						-.0607								-.0719	
150.000						-.0645								-.0719	
160.000						-.0638								-.0672	
170.000						-.0622								-.0572	
180.000						-.0622	-.0607	-.0585	-.0577	-.0555	-.0547	-.0532	-.0532	-.0532	-.0532

X/L	.4300	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0173	-.0173	-.0186	-.0186	-.0173	-.0199	-.0241	-.0264	-.0272	-.0280	-.0342	-.0404	-.0504	-.0582	-.0632
100.000	-.0206	-.0213	-.0206	-.0206	-.0199	-.0193	-.0210	-.0234	-.0249	-.0264	-.0280	-.0303	-.0334	-.0373	-.0431
110.000	-.0273	-.0268	-.0259	-.0266	-.0113	-.0259	-.0272	-.0272	-.0272	-.0272	-.0272	-.0264	-.0272	-.0303	-.032
120.000						-.0672								-.0659	
130.000						-.0690								-.0659	
140.000						-.0690								-.0659	
150.000						-.0698								-.0659	
160.000						-.0713								-.0659	
170.000						-.0644								-.0659	
180.000	-.0559	-.0539	-.0532	-.0526	-.0499	-.0589	-.0620	-.0659	-.0682	-.0690	-.0690	-.0690	-.0682	-.0667	-.0614

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0623		
70.000							-.0687	-.0669	-.0632
60.000							-.0705	-.0678	-.0632
90.000	-.0641	-.0669	-.0687	-.0705	-.0715	-.0696	-.0715	-.0641	-.0651
100.000	-.0458	-.0541	-.0586	-.0623	-.0641	-.0651			
110.000	-.0339	-.0403	-.0440	-.0458	-.0349	.0054			
120.000						.0887			
130.000						.0475			
140.000						-.0495			
150.000						-.0458			
160.000						-.0431			
170.000						-.0422			
180.000	-.0598	-.0577	-.0568	-.0550	-.0513	-.0339			

OA64 ORBITER ENTRY CONFIGURATION (RQ4005) (03 JAN 74)

REFERENCE DATA

SREF = .0000 SQ.IN. XMRP = .0000 IN.
LREF = .0000 IN. YMRP = .0000 IN.
BREF = .0000 IN. ZMRP = .0000 IN.
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = -2.000 ELEVON = -15.000

MACH (1) = 2.500 ALPHA (1) = 7.990 RN/L = 2.4994 BETA = -2.4200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2208	.1607	.1388												
70.000	.2104	.1797	.1432												
80.000	.1987	.1797	.1490												
90.000			.1695	.1067	.0141	-.0130	-.0146	-.0115	-.0055	-.0040	-.0025	-.0025	-.0032	-.0048	-.0082
100.000						-.0040	-.0010	-.0025	-.0010	-.0055	-.0055	-.0070	-.0116	-.0149	-.0183
110.000						.0081	-.0010	-.0055	-.0115	-.0266	-.0326	-.0351	-.0385	-.0435	-.0435
120.000						.0261								-.1125	
130.000						-.0432								-.1192	
140.000						-.1201								-.1108	
150.000						-.1276								-.1041	
160.000						-.1231								-.0974	
170.000						-.1216								-.0906	
180.000						-.1216	-.1155	-.1125	-.1065	-.0990	-.0914	-.0890	-.0856	-.0856	-.0805

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
50.000	-.0099	-.0149	-.0186	-.0183	-.0183	-.0183	-.0225	-.0256	-.0272	-.0272	-.0272	-.0225	-.0178	-.0178	-.0284
100.000	-.0200	-.0250	-.0267	-.0284	-.0301	-.0301	-.0334	-.0334	-.0381	-.0397	-.0412	-.0397	-.0334	-.0272	-.0299
110.000	-.0452	-.0435	-.0435	-.0452	-.0318	-.0553	-.0584	-.0600	-.0615	-.0600	-.0600	-.0600	-.0584	-.0584	-.0470
120.000						-.1293								-.1177	
130.000						-.1037								-.1177	
140.000						-.0834								-.0756	
150.000						-.0724								-.0584	
160.000						-.0646								-.0490	
170.000						-.0615								-.0381	
180.000	-.0772	-.0772	-.0704	-.0637	-.0804	-.0568	-.0521	-.0475	-.0443	-.0412	-.0350	-.0350	-.0350	-.0350	-.0315

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0827		
70.000							-.0734	-.0563	-.0579
80.000							-.0470	-.0284	-.0501
90.000	-.0315	-.0547	-.0641	-.0734	-.0749	-.0734	-.0051	-.0128	-.0439
100.000	-.0348	-.0470	-.0579	-.0687	-.0718	-.0967			
110.000	-.0439	-.0810	-.0672	-.0641	-.0159	.0998			
120.000						.2451			

OA64 ORBITER ENTRY CONFIGURATION (RQ4005)

MACH (1) = 2.500 ALPHA (1) = 7.990

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
130.000						.2379			
140.000						.0523			
150.000						.0725			
160.000						.1473			
170.000						.1127			
180.000	-.0208	-.0299	-.0284	-.0113	.1228	.2480			

MACH (1) = 2.500 ALPHA (2) = 10.010 RN/L = 2.4994 BETA = -2.4200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2146	.1722	.1416												
90.000	.1941	.1781	.1416												
80.000	.1752	.1693	.1416												
90.000			.1547	.1006	.0123	-.0150	-.0150	-.0119	-.0089	-.0074	-.0059	-.0059	-.0069	-.0103	-.0120
100.000						-.0119	-.0104	-.0104	-.0089	-.0089	-.0104	-.0104	-.0137	-.0154	-.0205
110.000						.0093	.0032	-.0029	-.0104	-.0226	-.0286	-.0289	-.0323	-.0357	-.0408
120.000						.0214								-.1287	
130.000						-.0498								-.1355	
140.000						-.1331								-.1287	
150.000						-.1392								-.1169	
160.000						-.1347								-.1084	
170.000						-.1316								-.0983	
180.000						-.1301	-.1256	-.1225	-.1165	-.1089	-.0998	-.0966	-.0932	-.0915	-.0865

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6860	.7100
PHI															
90.000	-.0137	-.0171	-.0154	-.0137	-.0154	-.0188	-.0233	-.0249	-.0280	-.0328	-.0280	-.0249	-.0170	-.0170	-.0254
100.000	-.0255	-.0272	-.0289	-.0272	-.0272	-.0272	-.0328	-.0343	-.0375	-.0391	-.0407	-.0407	-.0328	-.0264	-.0270
110.000	-.0479	-.0526	-.0543	-.0543	-.0289	-.0509	-.0517	-.0549	-.0564	-.0612	-.0612	-.0608	-.0596	-.0564	-.0487
120.000						-.1575								-.1401	
130.000						-.1386								-.1433	
140.000						-.1086								-.1149	
150.000						-.0849								-.0643	
160.000						-.0707								-.0612	
170.000						-.0612								-.0454	
180.000	-.0831	-.0780	-.0712	-.0645	-.0611	-.0549	-.0501	-.0488	-.0454	-.0438	-.0422	-.0407	-.0407	-.0407	-.0378

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									

OA64 ORBITER ENTRY CONFIGURATION (RQ4005)

MACH (1) = 2.300 ALPHA (2) = 10.010

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7870	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1029		
70.000							-.0890	-.0735	-.0750
80.000							-.0595	-.0487	-.0642
90.000	-.0378	-.0349	-.0673	-.0750	-.0797	-.0812	-.0192	-.0254	-.0595
100.000	-.0332	-.0533	-.0595	-.0755	-.0766	-.0843			
110.000	-.0440	-.0811	-.0719	-.0735	-.0378	.0954			
120.000						.2179			
130.000						.1631			
140.000						.0275			
150.000						.0010			
160.000						.1444			
170.000						.0954			
180.000	-.0270	-.0332	-.0378	-.0365	.0680	.3577			

MACH (1) = 2.500 ALPHA (3) = 12.000 RN/L = 2.4994 BETA = -2.4200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2103	.1577	.1451												
70.000	.1825	.1738	.1387												
80.000	.1533	.1592	.1358												
90.000			.1402	.0919	.0090	-.0186	-.0186	-.0140	-.0124	-.0124	-.0124	-.0124	-.0125	-.0125	-.0143
100.000						-.0170	-.0140	-.0140	-.0124	-.0140	-.0140	-.0170	-.0194	-.0194	-.0211
110.000						-.0017	-.0063	-.0109	-.0140	-.0232	-.0278	-.0314	-.0383	-.0434	-.0451
120.000						.0106								-.1428	
130.000						-.0553								-.1428	
140.000						-.1427								-.1428	
150.000						-.1489								-.1308	
160.000						-.1443								-.1188	
170.000						-.1397								-.1051	
180.000						-.1381	-.1351	-.1320	-.1243	-.1151	-.1075	-.1051	-.0983	-.0983	-.0914

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0125	-.0143	-.0143	-.0180	-.0180	-.0194	-.0232	-.0248	-.0264	-.0280	-.0280	-.0264	-.0232	-.0169	-.0276
100.000	-.0211	-.0228	-.0245	-.0245	-.0263	-.0297	-.0311	-.0327	-.0375	-.0390	-.0390	-.0406	-.0343	-.0311	-.0292
110.000	-.0468	-.0468	-.0468	-.0460	-.0263	-.0503	-.0517	-.0548	-.0564	-.0596	-.0596	-.0596	-.0596	-.0564	-.0543
120.000						-.1600								-.1385	
130.000						-.1701								-.1464	
140.000						-.1480								-.1622	
150.000						-.1243								-.1370	

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

OA64 ORBITER ENTRY CONFIGURATION

(RQ4005)

MACH (1) = 2.500 ALPHA (3) = 12.000

SECTION (1)FUSELAGE

DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
180.000						-.0769									
170.000						-.0722								-.0675	
160.000	-.0880	-.0794	-.0708	-.0674	-.0640	-.0596	-.0564	-.0548	-.0501	-.0501	-.0485	-.0501	-.0501	-.0580	
														-.0501	-.0480

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.6520	.9000	.9400
PHI									
80.000									
70.000							-.1234		
80.000							-.1061	-.0983	-.1014
90.000	-.0498	-.0590	-.0716	-.0810	-.0826	-.0889	-.0747	-.0606	-.0747
100.000	-.0339	-.0559	-.0606	-.0747	-.0810	-.0873	-.0339	-.0370	-.0684
110.000	-.0480	-.0853	-.7747	-.0747	-.0449	.0982			
120.000						.2019			
130.000						.1155			
140.000						-.0433			
150.000						-.0669			
160.000						.1486			
170.000						.0723			
180.000	-.0355	-.0433	-.0449	-.0480	-.0009	.3617			

MACH (1) = 2.500 ALPHA (4) = 14.010 RN/L = 2.4994 BETA = -2.4200

SECTION (1)FUSELAGE

DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI															
60.000	.2074	.1343	.1445												
70.000	.1885	.1650	.1358												
80.000	.1299	.1460	.1285												
90.000			.1212	.0803	.0046	-.0228	-.0228	-.0183	-.0167	-.0167	-.0152	-.0137	-.0139	-.0139	-.0157
100.000						-.0228	-.0183	-.0183	-.0183	-.0183	-.0183	-.0191	-.0191	-.0157	
110.000						-.0076	-.0122	-.0183	-.0228	-.0289	-.0335	-.0361	-.0378	-.0376	-.0395
120.000						.0016									
130.000						-.0594								-.1604	
140.000						-.1463								-.1587	
150.000						-.1554								-.1519	
160.000						-.1508								-.1417	
170.000						-.1463								-.1264	
180.000						-.1432	-.1402	-.1356	-.1295	-.1188	-.1112	-.1076	-.1008	-.1093	
														-.0991	-.0 2

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4005)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (4) = 14.010

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0191	-.0157	-.0139	-.0174	-.0191	-.0208	-.0226	-.0241	-.0273	-.0288	-.0319	-.0288	-.0241	-.0228	-.0311
100.000	-.0208	-.0225	-.0225	-.0242	-.0242	-.0276	-.0288	-.0319	-.0351	-.0351	-.0382	-.0382	-.0335	-.0335	-.0296
110.000	-.0412	-.0429	-.0446	-.0446	-.0242	-.0480	-.0507	-.0522	-.0538	-.0569	-.0585	-.0600	-.0569	-.0569	-.0548
120.000						-.1690								-.1412	
130.000						-.1755								-.1443	
140.000						-.1833								-.1646	
150.000						-.1381								-.1740	
160.000						-.0741								-.1100	
170.000						-.0710								-.0725	
180.000	-.0872	-.0804	-.0738	-.0702	-.0650	-.0632	-.0600	-.0585	-.0569	-.0569	-.0538	-.0553	-.0569	-.0585	-.0611

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.1559		
80.000							-.1338	-.1449	-.1370
70.000							-.0975	-.0975	-.0896
60.000							-.0706	-.0435	-.0659
90.000	-.0454	-.0643	-.0769	-.0864	-.0927	-.0785			
100.000	-.0375	-.0548	-.0659	-.0754	-.0706	-.0801			
110.000	-.0485	-.0659	-.0738	-.0548	-.0454	.1400			
120.000						.1932			
130.000						.1026			
140.000						-.0422			
150.000						-.0280			
160.000						.0781			
170.000						-.0248			
180.000	-.0483	-.0580	-.0827	-.0839	-.0422	.3588			

MACH (1) = 2.500 ALPHA (5) = 16.000 RN/L = 2.4994 BETA = -2.4200

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2017	.1185	.1461												
70.000	.1520	.1622	.1359												
60.000	.1110	.1330	.1242												
90.000			.1052	.0716	.0016	-.0243	-.0243	-.0228	-.0197	-.0197	-.0182	-.0167	-.0156	-.0156	-.0224
100.000						-.0289	-.0258	-.0228	-.0228	-.0228	-.0228	-.0197	-.0190	-.0173	-.0207
110.000						-.0197	-.0228	-.0243	-.0289	-.0334	-.0365	-.0360	-.0360	-.0377	-.0377
120.000						-.0152								-.1758	
130.000						-.0639								-.1672	
140.000						-.1493								-.1587	
150.000						-.1615								-.1553	

OA64 ORBITER ENTRY CONFIGURATION (RQ4005)

MACH (1) = 2.500 ALPHA (5) = 16.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
180.000						-.1584								-.1400	
170.000						-.1508								-.1144	
160.000						-.1493	-.1463	-.1402	-.1325	-.1219	-.1158	-.1093	-.1042	-.1006	-.0923

X/L	.4500	.4680	.4860	.5550	.5240	.5460	.5610	.5800	.5985	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0190	-.0190	-.0207	-.0207	-.0207	-.0224	-.0241	-.0256	-.0303	-.0319	-.0319	-.0303	-.0288	-.0303	-.0406
100.000	-.0224	-.0241	-.0207	-.0207	-.0241	-.0275	-.0272	-.0319	-.0319	-.0319	-.0319	-.0350	-.0288	-.0288	-.0342
110.000	-.0395	-.0429	-.0429	-.0446	-.0258	-.0463	-.0475	-.0506	-.0537	-.0537	-.0553	-.0553	-.0537	-.0522	-.0516
120.000						-.1689								-.1412	
130.000						-.1724								-.1412	
140.000						-.1802								-.1552	
150.000						-.1599								-.1568	
160.000						-.1536								-.1521	
170.000						-.0803								-.1006	
180.000	-.0889	-.0838	-.0769	-.0718	-.0701	-.0647	-.0631	-.0647	-.0631	-.0631	-.0647	-.0694	-.0709	-.0740	-.0801

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1733		
70.000							-.1638	-.1717	-.1622
80.000							-.1306	-.1306	-.1227
90.000	-.0579	-.0708	-.0816	-.0990	-.1038	-.0959	-.0911	-.0658	-.0911
100.000	-.0421	-.0811	-.0708	-.0802	-.0832	-.0927			
110.000	-.0485	-.0674	-.0769	-.0674	-.0532	.1257			
120.000						.1833			
130.000						.0911			
140.000						-.0358			
150.000						-.0185			
160.000						.0379			
170.000						-.0532			
180.000	-.0722	-.0801	-.0848	-.0880	-.0658	.3705			

OA64 ORBITER ENTRY CONFIGURATION (RQ4005)

MACH (1) = 2.500 ALPHA (6) = 18.000 RN/L = 2.4994 BETA = -2.4200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1983	.1006	.1502												
70.000	.1383	.1575	.1356												
80.000	.0933	.1181	.1225												
90.000			.0918	.0626	-.0002	-.0262	-.0262	-.0232	-.0216	-.0201	-.0186	-.0170	-.0194	-.0211	-.0211
100.000						-.0324	-.0308	-.0278	-.0247	-.0247	-.0247	-.0216	-.0211	-.0246	-.0246
110.000						-.0370	-.0339	-.0339	-.0339	-.0370	-.0370	-.0383	-.0366	-.0383	-.0383
120.000						-.0293								-.1926	
130.000						-.0707								-.1840	
140.000						-.1535								-.1686	
150.000						-.1673								-.1651	
160.000						-.1642								-.1583	
170.000						-.1565								-.1257	
180.000						-.1550	-.1504	-.1443	-.1335	-.1213	-.1136	-.1120	-.1069	-.1051	-.0983

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0211	-.0248	-.0211	-.0211	-.0211	-.0229	-.0257	-.0257	-.0288	-.0288	-.0288	-.0320	-.0382	-.0382	-.0606
100.000	-.0211	-.0248	-.0248	-.0229	-.0211	-.0280	-.0257	-.0273	-.0304	-.0288	-.0288	-.0320	-.0320	-.0320	-.0371
110.000	-.0417	-.0434	-.0434	-.0417	-.0211	-.0469	-.0476	-.0476	-.0491	-.0507	-.0507	-.0523	-.0476	-.0476	-.0496
120.000						-.1737								-.1381	
130.000						-.1724								-.1396	
140.000						-.1833								-.1505	
150.000						-.1864								-.1506	
160.000						-.1786								-.1599	
170.000						-.1100								-.1287	
180.000	-.0931	-.0880	-.0794	-.0743	-.0743	-.0741	-.0741	-.0757	-.0772	-.0788	-.0835	-.0897	-.0959	-.1006	-.1030

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1815		
70.000							-.1830	-.1830	-.1626
80.000							-.1626	-.1532	-.1501
90.000	-.0747	-.0936	-.1108	-.1203	-.1297	-.1234	-.1234	-.0920	-.1218
100.000	-.0481	-.0700	-.0779	-.0904	-.0967	-.1171			
110.000	-.0485	-.0700	-.0779	-.0763	-.0637	.0967			
120.000						.1714			
130.000						.0737			
140.000						-.0292			
150.000						-.0135			
160.000						.0132			
170.000						-.0606			
180.000	-.0991	-.0983	-.1030	-.1048	-.0669	.3497			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4005)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (7) = 20.000 RN/L = 2.4994 BETA = -2.4200

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1933	.0797	.1540												
70.000	.1219	.1325	.1365												
80.000	.0739	.1059	.1190												
90.000			.0768	.0564	-.0022	-.0284	-.0269	-.0253	-.0222	-.0207	-.0207	-.0192	-.0194	-.0211	-.0228
100.000						-.0392	-.0376	-.0346	-.0299	-.0284	-.0269	-.0238	-.0245	-.0211	-.0279
110.000						-.0592	-.0500	-.0453	-.0423	-.0423	-.0423	-.0381	-.0381	-.0381	-.0415
120.000						-.0515								-.1946	
130.000						-.0838								-.1946	
140.000						-.1577								-.1775	
150.000						-.1716								-.1656	
160.000						-.1701								-.1758	
170.000						-.1608								-.1265	
180.000						-.1577	-.1547	-.1439	-.1316	-.1239	-.1177	-.1129	-.1061	-.1044	-.0959

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0228	-.0228	-.0194	-.0194	-.0194	-.0211	-.0244	-.0260	-.0307	-.0322	-.0354	-.0463	-.0525	-.0618	-.0852
100.000	-.0228	-.0211	-.0245	-.0245	-.0177	-.0245	-.0244	-.0260	-.0291	-.0276	-.0260	-.0276	-.0276	-.0307	-.0447
110.000	-.0415	-.0432	-.0398	-.0415	-.0177	-.0415	-.0416	-.0447	-.0463	-.0478	-.0431	-.0447	-.0416	-.0431	-.0463
120.000						-.1758								-.1351	
130.000						-.1772								-.1751	
140.000						-.1803								-.1600	
150.000						-.1849								-.1631	
160.000						-.1896								-.1678	
170.000						-.1460								-.1444	
180.000	-.0939	-.0908	-.0857	-.0840	-.0857	-.0914	-.0914	-.0961	-.0946	-.1008	-.1039	-.1055	-.1117	-.1148	-.1164

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1849		
70.000							-.1927	-.1725	-.1600
80.000							-.1834	-.1725	-.1694
90.000	-.1024	-.1242	-.1382	-.1491	-.1569	-.1522	-.1522	-.1304	-.1413
100.000	-.0587	-.0837	-.0977	-.1070	-.1211	-.1444			
110.000	-.0541	-.0727	-.0868	-.0805	-.0727	.0518			
120.000						.1626			
130.000						.0691			
140.000						-.0338			
150.000						-.0213			
160.000						.0114			
170.000						-.0276			
180.000	-.1070	-.1101	-.1148	-.1164	-.0650	.2949			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (R34005)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (8) = 20.980 RN/L = 2.4994 BETA = -2.4200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1904	.0637	.1525												
70.000	.1132	.1402	.1351												
80.000	.0637	.0972	.1161												
90.000			.0681	.0535	-.0048	-.0318	-.0286	-.0255	-.0239	-.0225	-.0223	-.0223	-.0225	-.0225	-.0242
100.000						-.0445	-.0413	-.0366	-.0334	-.0318	-.0286	-.0270	-.0277	-.0295	-.0277
110.000						-.0731	-.0588	-.0540	-.0477	-.0477	-.0461	-.0434	-.0434	-.0452	-.0434
120.000						-.0651								-.2041	
130.000						-.0905								-.2041	
140.000						-.1667								-.1989	
150.000						-.1794								-.1692	
160.000						-.1778								-.1797	
170.000						-.1699								-.1308	
180.000						-.1667	-.1603	-.1476	-.1381	-.1286	-.1238	-.1163	-.1098	-.1081	-.1063

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0225	-.0225	-.0190	-.0190	-.0190	-.0225	-.0255	-.0270	-.0334	-.0413	-.0493	-.0604	-.0651	-.0794	-.1050
100.000	-.0242	-.0295	-.0277	-.0242	-.0190	-.0242	-.0255	-.0255	-.0286	-.0270	-.0270	-.0302	-.0334	-.0397	-.0578
110.000	-.0452	-.0434	-.0434	-.0417	-.0190	-.0434	-.0429	-.0429	-.0429	-.0445	-.0413	-.0413	-.0413	-.0413	-.0497
120.000						-.1832								-.1318	
130.000						-.1826								-.1318	
140.000						-.1905								-.1714	
150.000						-.1968								-.1714	
160.000						-.1952								-.1714	
170.000						-.1556								-.1524	
180.000	-.0993	-.0976	-.0976	-.0976	-.1011	-.1048	-.1032	-.1064	-.1080	-.1096	-.1159	-.1207	-.1207	-.1254	-.1277

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1960		
70.000							-.2025	-.1879	-.1635
80.000							-.2009	-.1895	-.1798
90.000	-.1229	-.1440	-.1554	-.1668	-.1700	-.1700	-.1604	-.1505	-.1554
100.000	-.0741	-.1017	-.1147	-.1277	-.1326	-.1651			
110.000	-.0578	-.0806	-.0952	-.0887	-.0871	.0284			
120.000						.1554			
130.000						.0676			
140.000						-.0399			
150.000						-.0301			
160.000						.0105			
170.000						-.0090			
180.000	-.1196	-.1229	-.1277	-.1212	-.0578	.2618			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4005)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (1) = 8.000 RN/L = 2.3129 BETA = -2.0050

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2145	.1949	.1344												
70.000	.2086	.1736	.1360												
80.000	.1965	.1753	.1377												
90.000			.1557	.1052	.0160	-.0102	-.0137	-.0120	-.0102	-.0085	-.0085	-.0085	-.0102	-.0102	-.0141
100.000						-.0067	-.0067	-.0067	-.0102	-.0102	-.0102	-.0120	-.0160	-.0180	-.0141
110.000						.0090	.0020	-.0050	-.0085	-.0207	-.0242	-.0277	-.0316	-.0356	-.0355
120.000						.0283								-.0881	
130.000						-.0242								-.0959	
140.000						-.0889								-.0979	
150.000						-.0977								-.0940	
160.000						-.0959								-.0981	
170.000						-.0959								-.0823	
180.000						-.0977	-.0907	-.0889	-.0872	-.0837	-.0819	-.0804	-.0784	-.0765	-.0765

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5990	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0141	-.0180	-.0199	-.0199	-.0199	-.0180	-.0172	-.0190	-.0225	-.0225	-.0243	-.0225	-.0172	-.0154	-.0217
100.000	-.0199	-.0238	-.0258	-.0277	-.0297	-.0316	-.0278	-.0260	-.0278	-.0314	-.0314	-.0314	-.0314	-.0314	-.0307
110.000	-.0375	-.0375	-.0355	-.0375	-.0277	-.0472	-.0437	-.0473	-.0473	-.0473	-.0473	-.0455	-.0455	-.0455	-.0487
120.000						-.1057								-.0845	
130.000						-.0880								-.0845	
140.000						-.0756								-.0721	
150.000						-.0650								-.0561	
160.000						-.0579								-.0473	
170.000						-.0561								-.0402	
180.000	-.0728	-.0706	-.0667	-.0648	-.0609	-.0544	-.0508	-.0473	-.0455	-.0473	-.0402	-.0384	-.0367	-.0402	-.0379

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0631		
70.000							-.0577	-.0505	-.0451
80.000							-.0451	-.0253	-.0271
90.000	-.0271	-.0397	-.0433	-.0541	-.0577	-.0577	-.0036	-.0036	-.0199
100.000	-.0253	-.0361	-.0415	-.0469	-.0523	-.0559			
110.000	-.0469	-.0505	-.0487	-.0505	-.0397	.1208			
120.000						.2293			
130.000						.2052			
140.000						.0252			
150.000						.0324			
160.000						.1010			
170.000						.0757			
180.000	-.0507	-.0343	-.0361	-.0343	.0433	.2052			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4005)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.930 ALPHA (2) = 10.010 RN/L = 2.5129 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2096	.1802	.1377												
70.000	.1918	.1704	.1361												
80.000	.1789	.1638	.1361												
90.000			.1426	.0965	.0161	-.0084	-.0119	-.0102	-.0102	-.0102	-.0102	-.0102	-.0151	-.0151	-.0189
100.000						-.0084	-.0084	-.0102	-.0102	-.0102	-.0119	-.0137	-.0189	-.0170	-.0189
110.000						.0038	-.0014	-.0049	-.0084	-.0172	-.0207	-.0247	-.0286	-.0306	-.0383
120.000						.0231								-.0983	
130.000						-.0294								-.1061	
140.000						-.0977								-.1041	
150.000						-.1047								-.1003	
160.000						-.1029								-.0964	
170.000						-.1012								-.0806	
180.000						-.1012	-.0977	-.0959	-.0924	-.0889	-.0889	-.0867	-.0848	-.0828	-.0770

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0189	-.0189	-.0189	-.0189	-.0170	-.0189	-.0189	-.0225	-.0260	-.0278	-.0278	-.0260	-.0225	-.0189	-.0189
100.000	-.0287	-.0286	-.0286	-.0286	-.0267	-.0267	-.0242	-.0242	-.0313	-.0331	-.0331	-.0349	-.0331	-.0331	-.0278
110.000	-.0422	-.0460	-.0460	-.0460	-.0209	-.0441	-.0420	-.0420	-.0420	-.0455	-.0473	-.0490	-.0473	-.0508	-.0490
120.000						-.1157								-.1004	
130.000						-.1128								-.1039	
140.000						-.1004								-.1075	
150.000						-.0809								-.0632	
160.000						-.0685								-.0561	
170.000						-.0597								-.0508	
180.000	-.0770	-.0751	-.0693	-.0654	-.0615	-.0561	-.0526	-.0508	-.0508	-.0490	-.0455	-.0455	-.0473	-.0455	-.0457

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0845		
70.000							-.0632	-.0579	-.0561
80.000							-.0473	-.0313	-.0384
90.000	-.0225	-.0349	-.0402	-.0455	-.0579	-.0579	-.0136	-.0101	-.0278
100.000	-.0225	-.0349	-.0384	-.0473	-.0508	-.0561			
110.000	-.0402	-.0437	-.0473	-.0508	-.0455	.1174			
120.000						.2036			
130.000						.1408			
140.000						-.0154			
150.000						-.0402			
160.000						.0909			
170.000						.0466			
180.000	-.0349	-.0384	-.0402	-.0420	-.0048	.2729			

OA64 ORBITER ENTRY CONFIGURATION (RQ4005)

MACH (2) = 2.950 ALPHA (3) = 12.000 RN/L = 2.5129 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2016	.1808	.1379												
70.000	.1788	.1641	.1346												
80.000	.1543	.1326	.1297												
90.000			.1314	.0882	.0151	-.0110	-.0127	-.0127	-.0127	-.0127	-.0127	-.0145	-.0179	-.0179	-.0179
100.000						-.0093	-.0110	-.0110	-.0127	-.0145	-.0162	-.0180	-.0217	-.0237	-.0179
110.000						.0012	-.0040	-.0093	-.0162	-.0215	-.0267	-.0314	-.0352	-.0371	-.0371
120.000						.0134								-.1064	
130.000						-.0354								-.1103	
140.000						-.1032								-.1083	
150.000						-.1102								-.1045	
160.000						-.1085								-.1026	
170.000						-.1067								-.0929	
180.000						-.1067	-.1015	-.0998	-.0963	-.0945	-.0928	-.0910	-.0872	-.0852	-.0775

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0179	-.0179	-.0179	-.0179	-.0179	-.0198	-.0224	-.0242	-.0277	-.0277	-.0277	-.0277	-.0242	-.0242	-.0233
100.000	-.0256	-.0217	-.0237	-.0237	-.0237	-.0256	-.0224	-.0242	-.0277	-.0330	-.0348	-.0348	-.0277	-.0330	-.0286
110.000	-.0390	-.0371	-.0390	-.0371	-.0179	-.0390	-.0419	-.0419	-.0437	-.0454	-.0472	-.0490	-.0472	-.0490	-.0483
120.000						-.1199								-.1057	
130.000						-.1252								-.1110	
140.000						-.1252								-.1145	
150.000						-.1128								-.1199	
160.000						-.0702								-.0844	
170.000						-.0685								-.0596	
180.000	-.0758	-.0737	-.0879	-.0641	-.0641	-.0596	-.0578	-.0561	-.0543	-.0525	-.0507	-.0507	-.0525	-.0525	-.0518

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1018		
70.000							-.0839	-.0786	-.0821
80.000							-.0536	-.0518	-.0500
90.000	-.0251	-.0411	-.0465	-.0483	-.0625	-.0500	-.0376	-.0215	-.0286
100.000	-.0251	-.0340	-.0393	-.0465	-.0518	-.0518			
110.000	-.0411	-.0465	-.0483	-.0518	-.0376	.1522			
120.000						.1908			
130.000						.1211			
140.000						-.0554			
150.000						-.0465			
160.000						.0819			
170.000						-.0037			
180.000	-.0429	-.0465	-.0483	-.0500	-.0269	.2808			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR 1A35/OA64 (LARC UPWT 1083) (R04005)

OA84 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (4) = 14.010 RN/L = 2.5129 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2050	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1971	.1383	.1383												
70.000	.1628	.1579	.1318												
80.000	.1334	.1399	.1231												
90.000			.1181	.0778	.0094	-.0151	-.0169	-.0169	-.0169	-.0187	-.0187	-.0187	-.0187	-.0187	-.0187
100.000						-.0169	-.0169	-.0187	-.0187	-.0204	-.0204	-.0222	-.0245	-.0264	-.0187
110.000						-.0099	-.0134	-.0187	-.0239	-.0292	-.0327	-.0342	-.0361	-.0361	-.0361
120.000						-.0029								-.1234	
130.000						-.0414								-.1195	
140.000						-.1081								-.1157	
150.000						-.1186								-.1137	
160.000						-.1151								-.1118	
170.000						-.1133								-.0963	
180.000						-.1116	-.1081	-.1046	-.1028	-.0993	-.0975	-.0963	-.0924	-.0904	-.0788

X/L	.4900	.4580	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7040
PHI															
90.000	-.0187	-.0206	-.0206	-.0206	-.0206	-.0245	-.0231	-.0248	-.0294	-.0266	-.0266	-.0266	-.0248	-.0231	-.0248
100.000	-.0206	-.0245	-.0264	-.0264	-.0264	-.0264	-.0231	-.0248	-.0266	-.0266	-.0284	-.0319	-.0248	-.0319	-.0284
110.000	-.0381	-.0361	-.0361	-.0381	-.0206	-.0400	-.0389	-.0407	-.0407	-.0442	-.0442	-.0442	-.0442	-.0460	-.0460
120.000						-.1234								-.1095	
130.000						-.1236								-.1095	
140.000						-.1342								-.1183	
150.000						-.1112								-.1148	
160.000						-.1218								-.1183	
170.000						-.0672								-.0689	
180.000	-.0738	-.0749	-.0710	-.0672	-.0652	-.0601	-.0583	-.0583	-.0566	-.0566	-.0548	-.0513	-.0530	-.0548	-.0583

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1218		
70.000							-.1095	-.1095	-.1095
80.000							-.0760	-.0777	-.0601
90.000	-.0264	-.0460	-.0566	-.0619	-.0654	-.0566	-.0530	-.0213	-.0389
100.000	-.0268	-.0372	-.0425	-.0495	-.0548	-.0548			
110.000	-.0389	-.0460	-.0442	-.0495	-.0389	.1639			
120.000						.1736			
130.000						.0881			
140.000						-.0548			
150.000						-.0231			
160.000						.0210			
170.000						-.0442			
180.000	-.0530	-.0583	-.0638	-.0654	-.0460	.2575			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (R04005)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (5) = 16.010 RN/L = 2.5129 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3730	.3940	.4050	.4310
PHI															
60.000	.1919	.1178	.1412												
70.000	.1478	.1327	.1298												
80.000	.1128	.1298	.1213												
90.000			.1022	.0674	.0082	-.0162	-.0197	-.0179	-.0179	-.0179	-.0179	-.0162	-.0188	-.0188	-.0207
100.000						-.0197	-.0214	-.0197	-.0197	-.0214	-.0214	-.0197	-.0227	-.0246	-.0207
110.000						-.0197	-.0197	-.0232	-.0266	-.0301	-.0319	-.0362	-.0362	-.0362	-.0362
120.000						-.0144								-.1351	
130.000						-.0440								-.1293	
140.000						-.1102								-.1235	
150.000						-.1206								-.1235	
160.000						-.1189								-.1176	
170.000						-.1154								-.1041	
180.000						-.1137	-.1085	-.1067	-.1050	-.1015	-.0980	-.0963	-.0944	-.0905	-.0808

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0207	-.0227	-.0207	-.0227	-.0227	-.0227	-.0232	-.0232	-.0250	-.0267	-.0267	-.0267	-.0250	-.0250	-.0320
100.000	-.0227	-.0266	-.0266	-.0266	-.0266	-.0266	-.0214	-.0232	-.0250	-.0267	-.0267	-.0267	-.0250	-.0267	-.0285
110.000	-.0362	-.0362	-.0362	-.0382	-.0207	-.0382	-.0373	-.0391	-.0408	-.0408	-.0426	-.0426	-.0408	-.0408	-.0426
120.000						-.1293								-.1148	
130.000						-.1289								-.1166	
140.000						-.1377								-.1166	
150.000						-.1377								-.1148	
160.000						-.1219								-.1166	
170.000						-.0884								-.0902	
180.000	-.0808	-.0750	-.0750	-.0711	-.0673	-.0637	-.0620	-.0637	-.0620	-.0620	-.0602	-.0620	-.0655	-.0708	-.0761

X/L	.7290	.7470	.7670	.7850	.8030	.8190	.8620	.9000	.9400
PHI							-.1324		
60.000							-.1289	-.1272	-.1201
70.000							-.1007	-.1060	-.0919
80.000							-.0690	-.0303	-.0637
90.000	-.0391	-.0549	-.0655	-.0778	-.0778	-.0708	-.0673		
100.000	-.0287	-.0408	-.0461	-.0549	-.0602	-.0461	.1491		
110.000	-.0355	-.0408	-.0461	-.0532	-.0461	.1700			
120.000						.0666			
130.000						-.0479			
140.000						-.0179			
150.000						-.0021			
160.000						-.0620			
170.000						.2361			
180.000	-.0708	-.0761	-.0813	-.0796	-.0549				

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4005)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (6) = 18.000 RN/L = 2.5129 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CF

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1870	.1005	.1429												
70.000	.1348	.1495	.1299												
80.000	.0953	.1144	.1179												
90.000			.0900	.0622	.0065	-.0179	-.0196	-.0179	-.0179	-.0179	-.0162	-.0162	-.0178	-.0178	-.0197
100.000						-.0214	-.0231	-.0214	-.0214	-.0231	-.0214	-.0196	-.0217	-.0236	-.0197
110.000						-.0318	-.0284	-.0284	-.0301	-.0318	-.0336	-.0351	-.0351	-.0351	-.0332
120.000						-.0301								-.1449	
130.000						-.0545								-.1410	
140.000						-.1137								-.1276	
150.000						-.1259								-.1237	
160.000						-.1241								-.1237	
170.000						-.1189								-.1083	
180.000						-.1171	-.1137	-.1119	-.1084	-.1050	-.0997	-.0968	-.0929	-.0891	-.0852

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0197	-.0217	-.0197	-.0197	-.0197	-.0197	-.0260	-.0242	-.0260	-.0260	-.0277	-.0295	-.0313	-.0349	-.0429
100.000	-.0255	-.0255	-.0236	-.0236	-.0255	-.0236	-.0260	-.0260	-.0260	-.0260	-.0277	-.0295	-.0313	-.0331	-.0268
110.000	-.0351	-.0351	-.0351	-.0332	-.0178	-.0371	-.0367	-.0385	-.0385	-.0403	-.0421	-.0421	-.0313	-.0403	-.0375
120.000						-.1314								-.1193	
130.000						-.1372								-.1193	
140.000						-.1444								-.1193	
150.000						-.1444								-.1193	
160.000						-.1372								-.1211	
170.000						-.1175								-.1139	
180.000	-.0833	-.0814	-.0775	-.0737	-.0737	-.0780	-.0744	-.0780	-.0744	-.0762	-.0780	-.0816	-.0888	-.0924	-.0928

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1338		
70.000							-.1410	-.1303	-.1178
80.000							-.1249	-.1249	-.1160
90.000	-.0553	-.0714	-.0321	-.0946	-.0982	-.0946	-.0928	-.0714	-.0892
100.000	-.0304	-.0484	-.0518	-.0625	-.0696	-.0892			
110.000	-.0288	-.0484	-.0518	-.0553	-.0518	.1266			
120.000						.1700			
130.000						.0570			
140.000						-.0464			
150.000						-.0304			
160.000						-.0232			
170.000						-.0750			
180.000	-.0892	-.0928	-.0946	-.0875	-.0518	.2053			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(RQ4003)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (7) = 20.000 RN/L = 2.3129 BETA = -2.0000

DEPENDENT VARIABLE CF

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1833	.0811	.1462												
70.000	.1231	.1478	.1315												
80.000	.0758	.1021	.1143												
90.000			.0758	.0565	.0057	-.0188	-.0188	-.0188	-.0170	-.0170	-.0170	-.0170	-.0178	-.0178	-.0178
100.000						-.0275	-.0275	-.0258	-.0240	-.0240	-.0223	-.0205	-.0236	-.0236	-.0217
110.000						-.0486	-.0398	-.0363	-.0363	-.0363	-.0363	-.0351	-.0351	-.0332	-.0351
120.000						-.0468								-.1488	
130.000						-.0661								-.1468	
140.000						-.1186								-.1430	
150.000						-.1291								-.1295	
160.000						-.1291								-.1314	
170.000						-.1239								-.1122	
180.000						-.1204	-.1169	-.1151	-.1099	-.1046	-.0993	-.0948	-.0929	-.0910	-.0871

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0197	-.0178	-.0159	-.0178	-.0159	-.0178	-.0206	-.0242	-.0260	-.0295	-.0313	-.0385	-.0457	-.0529	-.0678
100.000	-.0236	-.0236	-.0255	-.0236	-.0217	-.0217	-.0188	-.0242	-.0242	-.0278	-.0242	-.0242	-.0260	-.0295	-.0322
110.000	-.0351	-.0351	-.0332	-.0351	-.0159	-.0351	-.0349	-.0367	-.0367	-.0295	-.0367	-.0349	-.0260	-.0349	-.0339
120.000						-.1372								-.1193	
130.000						-.1426								-.1193	
140.000						-.1426								-.1193	
150.000						-.1462								-.1229	
160.000						-.1498								-.1247	
170.000						-.1301								-.1067	-.1071
180.000	-.0852	-.0852	-.0852	-.0852	-.0833	-.0888	-.0888	-.0852	-.0888	-.0924	-.0977	-.1013	-.1049		

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1392		
70.000							-.1428	-.1303	-.1213
80.000							-.1374	-.1392	-.1267
90.000	-.0785	-.0946	-.0982	-.1142	-.1178	-.1124	-.1178	-.0928	-.1089
100.000	-.0411	-.0807	-.0678	-.0803	-.0875	-.1071			
110.000	-.0375	-.0500	-.0571	-.0643	-.0660	.0749			
120.000						.1667			
130.000						.0588			
140.000						-.0660			
150.000						-.0446			
160.000						-.0429			
170.000						-.0714			
180.000	-.1017	-.0982	-.0964	-.0750	-.0660	.1378			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR 1A35/OA64 (LARC UPWT 1063) (RQ4005)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (6) = 20.960 RN/L = 2.5129 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1839	.0893	.1464												
70.000	.1146	.1431	.1317												
80.000	.0858	.0954	.1128												
90.000			.0710	.0571	.0048	-.0161	-.0178	-.0161	-.0143	-.0143	-.0143	-.0143	-.0187	-.0168	-.0187
100.000						-.0265	-.0265	-.0248	-.0230	-.0213	-.0196	-.0196	-.0226	-.0226	-.0226
110.000						-.0544	-.0422	-.0387	-.0352	-.0352	-.0352	-.0361	-.0361	-.0342	-.0361
120.000						-.0544								-.1525	
130.000						-.0718								-.1486	
140.000						-.1206								-.1525	
150.000						-.1293								-.1331	
160.000						-.1293								-.1351	
170.000						-.1241								-.1157	
180.000						-.1206	-.1171	-.1136	-.1084	-.1032	-.0997	-.0963	-.0943	-.0943	-.0905

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0187	-.0187	-.0168	-.0158	-.0168	-.0168	-.0169	-.0205	-.0258	-.0329	-.0364	-.0489	-.0577	-.0595	-.0792
100.000	-.0226	-.0245	-.0226	-.0206	-.0206	-.0206	-.0169	-.0205	-.0222	-.0205	-.0205	-.0240	-.0276	-.0329	-.0431
110.000	-.0361	-.0342	-.0323	-.0342	-.0168	-.0342	-.0311	-.0240	-.0329	-.0329	-.0311	-.0293	-.0258	-.0329	-.0359
120.000						-.1389								-.1127	
130.000						-.1393								-.1127	
140.000						-.1429								-.1198	
150.000						-.1446								-.1180	
160.000						-.1482								-.1216	
170.000						-.1287								-.1234	
180.000	-.0885	-.0905	-.0905	-.0905	-.0905	-.0879	-.0861	-.0897	-.0950	-.1003	-.1003	-.1056	-.1074	-.1109	-.1136

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1481		
70.000							-.1479	-.1371	-.1262
80.000							-.1479	-.1443	-.1334
90.000	-.0901	-.1085	-.1099	-.1208	-.1298	-.1280	-.1280	-.1099	-.1172
100.000	-.0521	-.0884	-.0810	-.0919	-.0991	-.1226			
110.000	-.0359	-.0939	-.0866	-.0720	-.0684	.0545			
120.000						.1541			
130.000						.0617			
140.000						-.0884			
150.000						-.0485			
160.000						-.0449			
170.000						-.0666			
180.000	-.1099	-.1081	-.0973	-.0810	-.0866	.1069			

OA64 ORBITER ENTRY CONFIGURATION (RQ4005)

MACH (3) = 4.000 ALPHA (1) = 8.010 RN/L = 3.4985 BETA = -1.9700

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1952	.1488	.1204												
70.000	.1915	.1545	.1204												
80.000	.1818	.1564	.1223												
90.000			.1330	.0931	.0277	.0073	.0024	.0004	-.0015	-.0025	-.0035	-.0035	-.0051	-.0051	-.0072
100.000						.0063	.0024	.0004	-.0025	-.0044	-.0064	-.0064	-.0062	-.0072	-.0093
110.000						.0121	.0063	.0034	.0014	-.0054	-.0093	-.0093	-.0125	-.0135	-.0135
120.000						.0336								-.0451	
130.000						.0043								-.0514	
140.000						-.0415								-.0525	
150.000						-.0474								-.0514	
160.000						-.0493								-.0514	
170.000						-.0493								-.0493	
180.000						-.0503	-.0503	-.0493	-.0483	-.0493	-.0483	-.0472	-.0472	-.0472	-.0461

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0083	-.0083	-.0093	-.0104	-.0125	-.0125	-.0161	-.0161	-.0161	-.0161	-.0181	-.0181	-.0181	-.0181	-.0161
100.000	-.0104	-.0114	-.0125	-.0125	-.0146	-.0167	-.0221	-.0231	-.0221	-.0211	-.0181	-.0181	-.0221	-.0221	-.0201
110.000	-.0156	-.0177	-.0177	-.0198	-.0062	-.0230	-.0301	-.0311	-.0321	-.0331	-.0321	-.0311	-.0291	-.0301	-.0261
120.000						-.0567								-.0582	
130.000						-.0602								-.0582	
140.000						-.0582								-.0592	
150.000						-.0532								-.0532	
160.000						-.0492								-.0462	
170.000						-.0472								-.0411	
180.000	-.0451	-.0451	-.0440	-.0440	-.0409	-.0472	-.0462	-.0462	-.0451	-.0421	-.0411	-.0401	-.0381	-.0371	-.0321

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
30.000							-.0451		
70.000							-.0301	-.0241	-.0251
80.000							-.0191	-.0120	-.0080
90.000	-.0191	-.0191	-.0221	-.0231	-.0241	-.0241	-.0030	.0090	.0060
100.000	-.0181	-.0201	-.0221	-.0221	-.0191	-.0311			
110.000	-.0281	-.0291	-.0311	-.0261	-.0060	.0983			
120.000						.1836			
130.000						.1495			
140.000						-.0010			
150.000						-.0080			
160.000						.0150			
170.000						.0010			
180.000	-.0271	-.0321	-.0331	-.0321	-.0050	.1194			

DATE 24 JAN 24 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4005)

OA64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (2) = 10.000 RN/L = 3.4985 BETA = -1.9700

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1919	.1605	.1209												
70.000	.1788	.1493	.1189												
80.000	.1615	.1463	.1179												
90.000			.1209	.0823	.0204	.0001	-.0060	-.0081	-.0101	-.0111	-.0121	-.0141	-.0156	-.0167	-.0189
100.000						.0001	-.0050	-.0070	-.0101	-.0121	-.0141	-.0162	-.0178	-.0189	-.0223
110.000						.0062	-.0020	-.0070	-.0121	-.0172	-.0202	-.0223	-.0245	-.0268	-.0290
120.000						.0163								-.0625	
130.000						-.0101								-.0681	
140.000						-.0548								-.0681	
150.000						-.0619								-.0681	
160.000						-.0639								-.0670	
170.000						-.0639								-.0658	
180.000						-.0649	-.0649	-.0639	-.0639	-.0629	-.0629	-.0625	-.0625	-.0625	-.0614

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0201	-.0212	-.0201	-.0201	-.0189	-.0178	-.0182	-.0202	-.0202	-.0223	-.0233	-.0233	-.0233	-.0223	-.0221
100.000	-.0234	-.0245	-.0245	-.0245	-.0245	-.0234	-.0223	-.0223	-.0223	-.0223	-.0253	-.0253	-.0263	-.0273	-.0283
110.000	-.0312	-.0323	-.0323	-.0335	-.0167	-.0335	-.0324	-.0324	-.0304	-.0304	-.0243	-.0324	-.0334	-.0334	-.0365
120.000						-.0770								-.0659	
130.000						-.0720								-.0710	
140.000						-.0700								-.0751	
150.000						-.0669								-.0741	
160.000						-.0598								-.0649	
170.000						-.0558								-.0466	
180.000	-.0803	-.0591	-.0569	-.0558	-.0547	-.0527	-.0507	-.0497	-.0487	-.0477	-.0456	-.0456	-.0446	-.0446	-.0459

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0665		
70.000							-.0459	-.0407	-.0396
80.000							-.0303	-.0190	-.0200
90.000	-.0190	-.0262	-.0293	-.0324	-.0334	-.0345	-.0117	.0028	-.0066
100.000	-.0241	-.0262	-.0262	-.0283	-.0283	-.0334			
110.000	-.0355	-.0376	-.0355	-.0324	-.0221	.1175			
120.000						.1796			
130.000						.1155			
140.000						-.0427			
150.000						-.0510			
160.000						.0100			
170.000						-.0086			
180.000	-.0427	-.0448	-.0448	-.0458	-.0241	.1000			

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (3) = 4.000 ALPHA (3) = 12.000 RN/L = 3.4985 BETA = -1.9700

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1880	.1482	.1234												
70.000	.1881	.1472	.1184												
80.000	.1433	.1363	.1154												
90.000			.1134	.0777	.0220	.0021	.0002	-.0048	-.0058	-.0088	-.0098	-.0108	-.0123	-.0135	-.0144
100.000						.0011	.0002	-.0038	-.0058	-.0098	-.0118	-.0128	-.0155	-.0163	-.0176
110.000						.0061	.0021	-.0048	-.0088	-.0148	-.0177	-.0198	-.0230	-.0230	-.0251
120.000						.0101								-.0647	
130.000						-.0128								-.0658	
140.000						-.0545								-.0658	
150.000						-.0615								-.0636	
160.000						-.0615								-.0636	
170.000						-.0595								-.0615	
180.000						-.0585	-.0585	-.0605	-.0605	-.0615	-.0605	-.0604	-.0593	-.0593	-.0572

X/L	.4500	.4680	.4880	.5090	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0144	-.0144	-.0133	-.0144	-.0133	-.0144	-.0138	-.0148	-.0167	-.0167	-.0177	-.0137	-.0177	-.0157	-.0152
100.000	-.0176	-.0176	-.0176	-.0165	-.0165	-.0165	-.0157	-.0167	-.0177	-.0167	-.0197	-.0207	-.0207	-.0207	-.0182
110.000	-.0262	-.0272	-.0272	-.0262	-.0059	-.0251	-.0237	-.0237	-.0247	-.0247	-.0257	-.0277	-.0277	-.0287	-.0292
120.000						-.0722								-.0664	
130.000						-.0714								-.0674	
140.000						-.0724								-.0724	
150.000						-.0684								-.0724	
160.000						-.0674								-.0764	
170.000						-.0595								-.0555	
180.000	-.0581	-.0551	-.0529	-.0518	-.0508	-.0495	-.0475	-.0456	-.0446	-.0426	-.0426	-.0426	-.0426	-.0426	-.0412

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0663		
70.000							-.0492	-.0503	-.0543
80.000							-.0272	-.0242	-.0292
90.000	-.0142	-.0192	-.0222	-.0272	-.0292	-.0222	-.0132	-.0102	-.0032
100.000	-.0162	-.0192	-.0192	-.0212	-.0232	-.0202			
110.000	-.0262	-.0282	-.0272	-.0262	-.0122	.1339			
120.000						.1790			
130.000						.0949			
140.000						-.0432			
150.000						-.0432			
160.000						.0068			
170.000						-.0072			
180.000	-.0372	-.0412	-.0442	-.0392	-.0152	.1039			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (R04005)

OA64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (4) = 14.010 RN/L = 3.4985 BETA = -1.9700

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1280	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1841	.1300	.1251												
70.000	.1526	.1428	.1182												
80.000	.1241	.1261	.1113			.0012	-.0037	-.0047	-.0057	-.0077	-.0087	-.0096	-.0110	-.0110	-.0110
90.000			.1025	.0710	.0199	-.0008	-.0037	-.0047	-.0077	-.0096	-.0106	-.0116	-.0142	-.0142	-.0142
100.000						.0012	-.0037	-.0067	-.0106	-.0146	-.0165	-.0195	-.0205	-.0205	-.0227
110.000						.0022								-.0724	
120.000						-.0175								-.0681	
130.000						-.0559								-.0671	
140.000						-.0637								-.0650	
150.000						-.0637								-.0639	
160.000						-.0627								-.0628	
170.000						-.0627	-.0618	-.0608	-.0608	-.0598	-.0598	-.0597	-.0586	-.0586	-.0565
180.000															

X/L	.4900	.4880	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0110	-.0110	-.0110	-.0110	-.0110	-.0121	-.0140	-.0140	-.0160	-.0160	-.0170	-.0170	-.0160	-.0150	-.0145
100.000	-.0142	-.0142	-.0142	-.0142	-.0142	-.0142	-.0150	-.0160	-.0170	-.0160	-.0190	-.0190	-.0180	-.0190	-.0175
110.000	-.0227	-.0216	-.0205	-.0205	-.0036	-.02[illegible]	-.0219	-.0229	-.0229	-.0239	-.0249	-.0259	-.0249	-.0269	-.0255
120.000						-.0724								-.0715	
130.000						-.0754								-.0715	
140.000						-.0774								-.0715	
150.000						-.0774								-.0764	
160.000						-.0715								-.0764	
170.000						-.0705								-.0715	
180.000	-.0544	-.0535	-.0512	-.0512	-.0502	-.0507	-.0497	-.0487	-.0487	-.0477	-.0487	-.0477	-.0467	-.0477	-.0474

X/L	.7290	.7470	.7570	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0713		
70.000							-.0644	-.0634	-.0604
80.000							-.0424	-.0404	-.0434
90.000	-.0125	-.0205	-.0245	-.0265	-.0294	-.0225	-.0205	-.0185	-.0035
100.000	-.0135	-.0175	-.0175	-.0205	-.0205	-.0175			
110.000	-.0225	-.0265	-.0245	-.0235	-.0045	.1461			
120.000						.1750			
130.000						.0773			
140.000						-.0504			
150.000						-.0464			
160.000						-.0125			
170.000						-.0314			
180.000	-.0454	-.0494	-.0514	-.0494	-.0334	.0942			

OA64 ORBITER ENTRY CONFIGURATION (RQ4003)

MACH (5) = 4.000 ALPHA (5) = 16.020 RN/L = 3.4985 BETA = -1.9700

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1810	.1134	.1284												
70.000	.1403	.1403	.1184												
80.000	.1085	.1174	.1105												
90.000			.0936	.0867	.0180	-.0008	-.0038	-.0048	-.0068	-.0088	-.0088	-.0088	-.0097	-.0097	-.0107
100.000						-.0048	-.0068	-.0078	-.0088	-.0108	-.0118	-.0128	-.0139	-.0150	-.0150
110.000						-.0068	-.0088	-.0118	-.0138	-.0177	-.0187	-.0208	-.0213	-.0213	-.0213
120.000						-.0068								-.0797	
130.000						-.0227								-.0755	
140.000						-.0615								-.0712	
150.000						-.0684								-.0702	
160.000						-.0684								-.0691	
170.000						-.0674								-.0691	
180.000						-.0664	-.0654	-.0644	-.0644	-.0634	-.0625	-.0617	-.0606	-.0606	-.0574

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0097	-.0107	-.0107	-.0118	-.0107	-.0107	-.0150	-.0160	-.0160	-.0180	-.0170	-.0170	-.0160	-.0160	-.0132
100.000	-.0139	-.0139	-.0139	-.0129	-.0129	-.0150	-.0180	-.0180	-.0180	-.0170	-.0190	-.0190	-.0180	-.0180	-.0142
110.000	-.0203	-.0203	-.0203	-.0203	-.0022	-.0192	-.0230	-.0240	-.0240	-.0250	-.0250	-.0260	-.0250	-.0270	-.0222
120.000						-.0765								-.0762	
130.000						-.0802								-.0762	
140.000						-.0843								-.0762	
150.000						-.0843								-.0762	
160.000						-.0812								-.0762	
170.000						-.0762								-.0782	
180.000	-.0574	-.0574	-.0564	-.0574	-.0564	-.0592	-.0602	-.0602	-.0592	-.0602	-.0592	-.0581	-.0581	-.0592	-.0573

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9450
PHI									
80.000							-.0723		
70.000							-.0733	-.0725	-.0663
90.000							-.0593	-.0623	-.0603
90.000	-.0142	-.0252	-.0302	-.0342	-.0392	-.0362	-.0352	-.0252	-.0202
100.000	-.0112	-.0182	-.0182	-.0222	-.0232	-.0272			
110.000	-.0192	-.0232	-.0222	-.0212	-.0072	.1609			
120.000						.1729			
130.000						.0709			
140.000						-.0573			
150.000						-.0492			
160.000						-.0352			
170.000						-.0533			
180.000	-.0363	-.0393	-.0813	-.0313	-.0432	.0598			

OA64 ORBITER ENTRY CONFIGURATION (RQ4005)

MACH (3) = 4.000 ALPHA (6) = 18.000 RN/L = 3.4985 BETA = -1.9700

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1770	.0939	.1269												
70.000	.1269	.1339	.1159												
80.000	.0899	.1039	.1049												
90.000			.0819	.0598	.0148	-.0032	-.0062	-.0072	-.0082	-.0102	-.0112	-.0092	-.0086	-.0086	-.0097
100.000						-.0082	-.0122	-.0112	-.0122	-.0142	-.0142	-.0142	-.0130	-.0140	-.0140
110.000						-.0192	-.0182	-.0182	-.0192	-.0222	-.0222	-.0217	-.0217	-.0217	-.0217
120.000						-.0212								-.0860	
130.000						-.0362								-.0827	
140.000						-.0673								-.0806	
150.000						-.0753								-.0762	
160.000						-.0743								-.0762	
170.000						-.0723								-.0751	
180.000						-.0713	-.0713	-.0693	-.0693	-.0703	-.0673	-.0653	-.0642	-.0631	-.0620

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0097	-.0108	-.0108	-.0108	-.0108	-.0108	-.0122	-.0132	-.0132	-.0132	-.0152	-.0142	-.0162	-.0182	-.0220
100.000	-.0130	-.0130	-.0130	-.0140	-.0130	-.0140	-.0152	-.0152	-.0152	-.0132	-.0152	-.0162	-.0142	-.0152	-.0139
110.000	-.0217	-.0217	-.0195	-.0184	-.0020	-.0217	-.0212	-.0222	-.0222	-.0232	-.0222	-.0232	-.0232	-.0232	-.0200
120.000						-.0817								-.0763	
130.000						-.0823								-.0763	
140.000						-.0813								-.0773	
150.000						-.0843								-.0753	
160.000						-.0863								-.0753	
170.000						-.0793								-.0773	
180.000	-.0620	-.0620	-.0620	-.0620	-.0620	-.0643	-.0653	-.0653	-.0643	-.0633	-.0653	-.0653	-.0673	-.0583	-.0672

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0742		
70.000							-.0792	-.0742	-.0702
80.000							-.0702	-.0732	-.0612
90.000	-.0270	-.0371	-.0431	-.0491	-.0551	-.0521	-.0511	-.0371	-.0421
100.000	-.0119	-.0190	-.0230	-.0270	-.0320	-.0421			
110.000	-.0170	-.0270	-.0220	-.0220	-.0119	.1568			
120.000						.1769			
130.000						.0694			
140.000						-.0622			
150.000						-.0501			
160.000						-.0501			
170.000						-.0652			
180.000	-.0862	-.0872	-.0571	-.0501	-.0471	.0142			

OA64 ORBITER ENTRY CONFIGURATION (RQ4005)

MACH (3) = 4.000 ALPHA (7) = 20.010 RN/L = 3.4985 BETA = -1.9700

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2840	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1741	.0818	.1333												
70.000	.1184	.1343	.1204												
80.000	.0787	.0956	.1055												
90.000			.0747	.0608	.0180	.0002	-.0028	-.0048	-.0038	-.0048	-.0048	-.0058	-.0041	-.0052	-.0052
100.000						-.0060	-.0088	-.0098	-.0088	-.0108	-.0108	-.0098	-.0084	-.0095	-.0095
110.000						-.0257	-.0207	-.0187	-.0177	-.0197	-.0197	-.0181	-.0171	-.0171	-.0171
120.000						-.0287								-.0850	
130.000						-.0436								-.0828	
140.000						-.0674								-.0839	
150.000						-.0744								-.0785	
160.000						-.0734								-.0785	
170.000						-.0714								-.0753	
180.000						-.0694	-.0704	-.0684	-.0684	-.0674	-.0664	-.0634	-.0623	-.0623	-.0623

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0052	-.0083	-.0052	-.0052	-.0041	-.0052	-.0062	-.0072	-.0112	-.0122	-.0142	-.0172	-.0222	-.0262	-.0369
100.000	-.0084	-.0084	-.0095	-.0095	-.0084	-.0084	-.0112	-.0102	-.0112	-.0122	-.0102	-.0112	-.0092	-.0142	-.0167
110.000	-.0160	-.0160	-.0138	-.0160	.0023	-.0160	-.0182	-.0192	-.0182	-.0122	-.0182	-.0172	-.0162	-.0172	-.0167
120.000						-.0817								-.0743	
130.000						-.0843								-.0743	
140.000						-.0783								-.0743	
150.000						-.0843								-.0743	
160.000						-.0853								-.0743	
170.000						-.0843								-.0763	
180.000	-.0813	-.0813	-.0813	-.0823	-.0834	-.0863	-.0863	-.0843	-.0893	-.0703	-.0723	-.0733	-.0743	-.0753	-.0742

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0772		
70.000							-.0822	-.0762	-.0732
80.000							-.0792	-.0812	-.0691
90.000	-.0429	-.0530	-.0601	-.0671	-.0701	-.0681	-.0681	-.0681	-.0601
100.000	-.0177	-.0268	-.0328	-.0419	-.0469	-.0580			
110.000	-.0167	-.0207	-.0238	-.0268	-.0228	.1033			
120.000						.1728			
130.000						.0720			
140.000						-.0661			
150.000						-.0500			
160.000						-.0550			
170.000						-.0671			
180.000	-.0711	-.0681	-.0601	-.0580	-.0540	-.0006			

OA64 ORBITER ENTRY CONFIGURATION (RQ4005)

MACH (5) = 4.000 ALPHA (8) = 20.980 RN/L = 3.4985 BETA = -1.9700

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0970	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1719	.0728	.1342												
70.000	.1103	.1332	.1205												
60.000	.0696	.0915	.1034												
90.000			.0696	.0587	.0190	.0011	-.0019	-.0019	-.0019	-.0029	-.0039	-.0039	-.0056	-.0056	-.0056
100.000						-.0079	-.0079	-.0079	-.0079	-.0088	-.0088	-.0079	-.0099	-.0110	-.0099
110.000						-.0297	-.0209	-.0178	-.0168	-.0178	-.0188	-.0185	-.0185	-.0174	-.0185
120.000						-.0327								-.0882	
130.000						-.0476								-.0861	
140.000						-.0704								-.0861	
150.000						-.0754								-.0828	
160.000						-.0744								-.0818	
170.000						-.0714								-.0796	
180.000						-.0704	-.0694	-.0684	-.0684	-.0674	-.0664	-.0657	-.0657	-.0557	-.0657

X/L	.4500	.4660	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0056	-.0067	-.0067	-.0056	-.0024	-.0056	-.0083	-.0093	-.0133	-.0153	-.0173	-.0205	-.0253	-.0325	-.0450
100.000	-.0088	-.0099	-.0099	-.0099	-.0088	-.0088	-.0103	-.0093	-.0103	-.0093	-.0093	-.0123	-.0123	-.0155	-.0188
110.000	-.0183	-.0183	-.0163	-.0174	.0041	-.0174	-.0183	-.0173	-.0173	-.0173	-.0173	-.0123	-.0133	-.0153	-.0157
120.000						-.0850								-.0753	
130.000						-.0853								-.0753	
140.000						-.0823								-.0753	
150.000						-.0863								-.0763	
160.000						-.0853								-.0763	
170.000						-.0883								-.0773	
180.000	-.0848	-.0857	-.0857	-.0857	-.0857	-.0883	-.0893	-.0923	-.0933	-.0953	-.0973	-.0973	-.0983	-.0983	-.0932

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
80.000							-.0782		
70.000							-.0802	-.0772	-.0722
60.000							-.0822	-.0802	-.0701
90.000	-.0920	-.0831	-.0881	-.0732	-.0752	-.0742	-.0742	-.0621	-.0631
100.000	-.0238	-.0329	-.0389	-.0490	-.0530	-.0641			
110.000	-.0197	-.0228	-.0268	-.0319	-.0248	.0820			
120.000						.1616			
130.000						.0729			
140.000						-.0661			
150.000						-.0500			
160.000						-.0520			
170.000						-.0641			
180.000	-.0712	-.0671	-.0831	-.0621	-.0560	-.0016			

OA64 ORBITER ENTRY CONFIGURATION (RQ4005)

MACH (4) = 4.500 ALPHA (1) = 8.010 RN/L = 3.5000 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1933	.1527	.1163												
70.000	.1874	.1492	.1157												
80.000	.1756	.1498	.1169												
90.000			.1251	.0863	.0276	.0088	.0047	.0017	.0000	-.0018	-.0036	-.0042	-.0049	-.0068	-.0080
100.000						.0088	.0052	.0017	-.0012	-.0036	-.0053	-.0065	-.0074	-.0086	-.0105
110.000						.0135	.0064	.0017	-.0024	-.0077	-.0094	-.0092	-.0111	-.0135	-.0166
120.000						.0258								-.0380	
130.000						.0058								-.0442	
140.000						-.0318								-.0454	
150.000						-.0382								-.0448	
160.000						-.0412								-.0442	
170.000						-.0406								-.0430	
180.000						-.0412	-.0418	-.0418	-.0418	-.0423	-.0423	-.0411	-.0417	-.0417	-.0417

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0092	-.0105	-.0111	-.0117	-.0123	-.0117	-.0149	-.0140	-.0149	-.0149	-.0140	-.0158	-.0158	-.0158	-.0218
100.000	-.0117	-.0129	-.0135	-.0147	-.0154	-.0166	-.0140	-.0195	-.0185	-.0185	-.0185	-.0185	-.0185	-.0185	-.0238
110.000	-.0188	-.0184	-.0196	-.0203	-.0154	-.0221	-.0258	-.0258	-.0268	-.0258	-.0249	-.0249	-.0231	-.0249	-.0277
120.000						-.0160								-.0459	
130.000						-.0487								-.0459	
140.000						-.0067								-.0450	
150.000						-.0441								-.0459	
160.000						-.0441								-.0432	
170.000						-.0441								-.0395	
180.000	-.0411	-.0411	-.0405	-.0399	-.0387	-.0432	-.0404	-.0395	-.0386	-.0386	-.0368	-.0350	-.0350	-.0350	-.0363

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0389		
70.000							-.0225	-.0192	-.0152
80.000							-.0113	-.0099	-.0080
90.000	-.0145	-.0185	-.0198	-.0218	-.0198	-.0095	-.0020	.0032	.0039
100.000	-.0172	-.0185	-.0198	-.0192	-.0119	.0006			
110.000	-.0216	-.0244	-.0257	-.0185	-.0033	.0513			
120.000						.1594			
130.000						.1278			
140.000						-.0093			
150.000						-.0231			
160.000						-.0152			
170.000						-.0251			
180.000	-.0304	-.0304	-.0317	-.0284	-.0119	.0783			

OA64 ORBITER ENTRY CONFIGURATION (R04005)

MACH (4) = 4.500 ALPHA (2) = 10.010 RN/L = 3.5000 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1861	.1491	.1139												
70.000	.1718	.1420	.1103												
80.000	.1533	.1372	.1091												
90.000			.1121	.0757	.0214	.0035	-.0013	-.0037	-.0055	-.0079	-.0091	-.0109	-.0124	-.0136	-.0155
100.000						.0029	-.0007	-.0031	-.0067	-.0091	-.0115	-.0126	-.0142	-.0155	-.0179
110.000						.0076	.0011	-.0043	-.0091	-.0138	-.0162	-.0167	-.0197	-.0210	-.0234
120.000						.0112								-.0491	
130.000						-.0061								-.0522	
140.000						-.0419								-.0528	
150.000						-.0485								-.0516	
160.000						-.0497								-.0516	
170.000						-.0497								-.0503	
180.000						-.0497	-.0503	-.0503	-.0508	-.0508	-.0514	-.0491	-.0497	-.0503	-.0491

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0155	-.0161	-.0161	-.0155	-.0155	-.0148	-.0150	-.0150	-.0169	- 0178	-.0178	-.0187	-.0187	-.0178	-.0240
100.000	-.0185	-.0191	-.0191	-.0191	-.0191	-.0185	-.0178	-.0187	-.0187	-.0187	-.0196	-.0205	-.0214	-.0214	-.0253
110.000	-.0248	-.0259	-.0259	-.0259	-.0179	-.0259	-.0269	-.0251	-.0260	-.0251	-.0251	-.0269	-.0260	-.0278	-.0320
120.000						-.0216								-.0505	
130.000						-.0542								-.0505	
140.000						-.0314								-.0505	
150.000						-.0514								-.0505	
160.000						-.0496								-.0514	
170.000						-.0487								-.0487	
180.000	-.0491	-.0479	-.0467	-.0461	-.0448	-.0442	-.0442	-.0423	-.0405	-.0396	-.0396	-.0387	-.0396	-.0396	-.0399

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0493		
70.000							-.0359	-.0326	-.0326
80.000							-.0160	-.0153	-.0180
90.000	-.0173	-.0200	-.0233	-.0226	-.0246	-.0160	-.0060	-.0060	.0000
100.000	-.0200	-.0215	-.0243	-.0220	-.0187	-.0033			
110.000	-.0280	-.0293	-.0256	-.0253	-.0053	.0871			
120.000						.1563			
130.000						.1071			
140.000						-.0273			
150.000						-.0353			
160.000						-.0240			
170.000						-.0346			
180.000	-.0386	-.0379	-.0393	-.0353	-.0173	.0812			

OA84 ORBITER ENTRY CONFIGURATION (RQ4005)

MACH (4) = 4.500 ALPHA (3) = 12.000 RN/L = 3.5000 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1803	.1475	.1148												
70.000	.1565	.1374	.1088												
80.000	.1338	.1267	.1058												
90.000			.1017	.0695	.0194	.0016	-.0032	-.0050	-.0074	-.0092	-.0104	-.0116	-.0120	-.0126	-.0138
100.000						.0014	-.0032	-.0056	-.0080	-.0110	-.0122	-.0139	-.0144	-.0150	-.0163
110.000						.0039	-.0014	-.0068	-.0110	-.0157	-.0181	-.0181	-.0199	-.0211	-.0224
120.000						.0039								-.0559	
130.000						-.0127								-.0559	
140.000						-.0461								-.0547	
150.000						-.0527								-.0535	
160.000						-.0533								-.0522	
170.000						-.0527								-.0516	
180.000						-.0527	-.0527	-.0533	-.0539	-.0539	-.0535	-.0510	-.0510	-.0510	-.0498

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0138	-.0138	-.0138	-.0138	-.0138	-.0138	-.0134	-.0152	-.0152	-.0170	-.0179	-.0179	-.0179	-.0161	-.0221
100.000	-.0163	-.0175	-.0163	-.0163	-.0163	-.0163	-.0161	-.0161	-.0179	-.0179	-.0179	-.0197	-.0197	-.0197	-.0234
110.000	-.0230	-.0230	-.0236	-.0236	-.0138	-.0224	-.0215	-.0225	-.0225	-.0225	-.0234	-.0252	-.0252	-.0261	-.0307
120.000						-.0199								-.0551	
130.000						-.0587								-.0542	
140.000						-.0433								-.0551	
150.000						-.0587								-.0565	
160.000						-.0578								-.0560	
170.000						-.0542								-.0578	
180.000	-.0492	-.0486	-.0474	-.0468	-.0462	-.0460	-.0451	-.0442	-.0433	-.0424	-.0424	-.0406	-.0406	-.0415	-.0400

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
60.000							-.0500		
70.000							-.0466	-.0480	-.0433
80.000							-.0241	-.0261	-.0294
90.000	-.0141	-.0188	-.0221	-.0241	-.0254	-.0134	-.0095	-.0128	-.0041
100.000	-.0174	-.0188	-.0188	-.0241	-.0174	-.0015			
110.000	-.0247	-.0287	-.0281	-.0234	-.0015	.0948			
120.000						.1612			
130.000						.0809			
140.000						-.0347			
150.000						-.0413			
160.000						-.0300			
170.000						-.0413			
180.000	-.0360	-.0373	-.0373	-.0314	-.0128	.1791			

OA64 ORBITER ENTRY CONFIGURATION (R04005)

MACH (4) = 4.500 ALPHA (4) = 14.000 RN/L = 3.5000 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0890	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1733	.1480	.1178												
70.000	.1459	.1338	.1089												
80.000	.1160	.1166	.1030												
90.000			.0929	.0681	.0195	.0017	-.0024	-.0042	-.0060	-.0072	-.0089	-.0095	-.0125	-.0125	-.0132
100.000						-.0007	-.0036	-.0060	-.0078	-.0095	-.0113	-.0119	-.0150	-.0156	-.0162
110.000						-.0001	-.0036	-.0078	-.0113	-.0149	-.0166	-.0186	-.0211	- 0211	-.0223
120.000						-.0012								-.0644	
130.000						-.0161								-.0614	
140.000						-.0474								-.0589	
150.000						-.0540								-.0577	
160.000						-.0540								-.0565	
170.000						-.0534								-.0553	
180.000						-.0534	-.0534	-.0528	-.0534	-.0534	-.0528	-.0528	-.0528	-.0528	-.0522

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0132	-.0132	-.0125	-.0138	-.0138	-.0138	-.0134	-.0143	-.0161	-.0161	-.0161	-.0161	-.0152	-.0143	-.0242
100.000	-.0162	-.0162	-.0156	-.0156	-.0150	-.0156	-.0152	-.0152	-.0161	-.0161	-.0180	-.0180	-.0189	-.0180	-.0249
110.000	-.0229	-.0229	-.0217	-.0211	-.0144	-.0211	-.0198	-.0207	-.0207	-.0216	-.0225	-.0234	-.0225	-.0243	-.0323
120.000						-.0199								-.0588	
130.000						-.0624								-.0588	
140.000						-.0533								-.0597	
150.000						-.0651								-.0624	
160.000						-.0615								-.0615	
170.000						-.0597								-.0633	
180.000	-.0510	-.0498	-.0498	-.0492	-.0492	-.0497	-.0497	-.0497	-.0506	-.0506	-.0506	-.0497	-.0497	-.0479	-.0524

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0565		
70.000							-.0618	-.0605	-.0558
60.000							-.0457	-.0477	-.0517
90.000	-.0188	-.0242	-.0282	-.0309	-.0323	-.0242	-.0222	-.0229	-.0115
100.000	-.0188	-.0215	-.0209	-.0242	-.0229	-.0061			
110.000	-.0282	-.0285	-.0276	-.0256	-.0047	.1054			
120.000						.1611			
130.000						.0664			
140.000						-.0423			
150.000						-.0457			
160.000						-.0370			
170.000						-.0477			
180.000	-.0497	-.0517	-.0497	-.0383	-.0330	.0993			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA33/OA64 (LARC UPWT 1063) (RQ4009)

OA64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (5) = 16.010 RN/L = 3.5000 BETA = -2.0000

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1711	.1474	.1189												
70.000	.1313	.1290	.1088												
80.000	.0993	.1070	.0999												
90.000			.0838	.0619	.0173	.0001	-.0035	-.0052	-.0064	-.0082	-.0094	-.0094	-.0118	-.0118	-.0130
100.000						-.0035	-.0070	-.0076	-.0094	-.0106	-.0124	-.0130	-.0155	-.0155	-.0155
110.000						-.0076	-.0100	-.0118	-.0135	-.0165	-.0177	-.0204	-.0222	-.0222	-.0228
120.000						-.0106								-.0693	
130.000						-.0248								-.0663	
140.000						-.0521								-.0632	
150.000						-.0581								-.0620	
160.000						-.0581								-.0614	
170.000						-.0569								-.0608	
180.000						-.0563	-.0557	-.0557	-.0551	-.0551	- 0551	-.0552	-.0546	-.0552	-.0540

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0118	-.0130	-.0130	-.0136	-.0136	-.0136	-.0124	-.0124	-.0133	-.0133	-.0142	-.0133	-.0124	-.0133	-.0223
100.000	-.0155	-.0155	-.0148	-.0148	-.0155	-.0161	-.0142	-.0151	-.0161	-.0161	-.0161	-.0161	-.0151	-.0151	-.0189
110.000	-.0222	-.0216	-.0210	-.0197	-.0142	-.0197	-.0188	-.0206	-.0206	-.0215	-.0215	-.0224	-.0215	-.0233	-.0262
120.000						-.0197								-.0633	
130.000						-.0651								-.0633	
140.000						-.0560								-.0642	
150.000						-.0669								-.0633	
160.000						-.0687								-.0633	
170.000						-.0642								-.0642	
180.000	-.0534	-.0534	-.0534	-.0540	-.0546	-.0551	-.0560	-.0551	-.0560	-.0560	-.0569	-.0560	-.0551	-.0542	-.0553

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0560		
70.000							-.0626	-.0593	-.0553
80.000							-.0533	-.0560	-.0560
90.000	-.0163	-.0262	-.0309	-.0342	-.0381	-.0355	-.0322	-.0342	-.0203
100.000	-.0123	-.0163	-.0170	-.0196	-.0209	-.0070			
110.000	-.0196	-.0216	-.0209	-.0196	-.0024	.1226			
120.000						.1656			
130.000						.0671			
140.000						-.0474			
150.000						-.0447			
160.000						-.0467			
170.000						-.0567			
180.000	-.0540	-.0547	-.0474	-.0434	-.0428	.0280			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4005)

OA64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (6) = 18.000 RN/L = 3.5000 BETA = -2.0000

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1670	.1480	.1224												
70.000	.1195	.1286	.1100												
80.000	.0844	.0969	.0981			.0007	-.0023	-.0040	-.0052	-.0064	-.0082	-.0076	-.0077	-.0089	-.0083
90.000			.0755	.0571	.0191	-.0046	-.0076	-.0082	-.0088	-.0106	-.0112	-.0112	-.0120	-.0126	-.0126
100.000						-.0153	-.0135	-.0141	-.0147	-.0171	-.0177	-.0187	-.0193	-.0193	-.0187
110.000						-.0189								-.0693	
120.000						-.0325								-.0675	
130.000						-.0533								-.0663	
140.000						-.0605								-.0644	
150.000						-.0599								-.0632	
160.000						-.0587								-.0626	
170.000						-.0575	-.0569	-.0563	-.0569	-.0563	-.0563	-.0553	-.0553	-.0553	-.0553
180.000															

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0089	-.0096	-.0096	-.0102	-.0096	-.0096	-.0079	-.0097	-.0088	-.0115	-.0115	-.0106	-.0133	-.0151	-.0338
100.000	-.0126	-.0114	-.0120	-.0126	-.0126	-.0126	-.0124	-.0124	-.0124	-.0115	-.0135	-.0124	-.0106	-.0106	-.0191
110.000	-.0187	-.0187	-.0175	-.0163	-.1010	-.0187	-.0188	-.0188	-.0188	-.0197	-.0188	-.0197	-.0179	-.0179	-.0244
120.000						-.0187								-.0633	
130.000						-.0660								-.0524	
140.000						-.0596								-.0633	
150.000						-.0678								-.0633	
160.000						-.0696								-.0642	
170.000						-.0687								-.0642	
180.000	-.0553	-.0553	-.0553	-.0555	-.0559	-.0587	-.0569	-.0578	-.0578	-.0587	-.0587	-.0587	-.0606	-.0615	-.0652

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0639		
70.000							-.0679	-.0652	-.0612
80.000							-.0652	-.0665	-.0612
90.000	-.0311	-.0385	-.0445	-.0498	-.0532	-.0512	-.0525	-.0472	-.0445
100.000	-.0138	-.0204	-.0224	-.0278	-.0318	-.0239			
110.000	-.0171	-.0204	-.0211	-.0204	-.0084	.1286			
120.000						.1680			
130.000						.0664			
140.000						-.0545			
150.000						-.0512			
160.000						-.0538			
170.000						-.0605			
180.000	-.0612	-.0552	-.0518	-.0492	-.0492	-.0271			

OA64 ORBITER ENTRY CONFIGURATION (R04005)

MACH (4) = 4.500 ALPHA (7) = 20.010 RN/L = 3.5000 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1034	.1500	.1240												
70.000	.1098	.1283	.1122												
80.000	.0714	.0885	.0974												
90.000			.0690	.0560	.0211	.0034	.0004	-.0002	-.0014	-.0031	-.0026	-.0026	-.0055	-.0055	-.0055
100.000						-.0037	-.0055	-.0061	-.0061	-.0073	-.0073	-.0067	-.0085	-.0091	-.0091
110.000						-.0209	-.0156	-.0132	-.0138	-.0150	-.0156	-.0158	-.0164	-.0158	-.0164
120.000						-.0256								-.0699	
130.000						-.0380								-.0681	
140.000						-.0564								-.0681	
150.000						-.0605								-.0669	
160.000						-.0599								-.0663	
170.000						-.0581								-.0639	
180.000						-.0569	-.0564	-.0558	-.0558	-.0552	-.0552	-.0547	-.0553	-.0559	-.0559

X/L	.4550	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0055	-.0082	.0055	-.0055	-.0033	-.0036	-.0029	-.0056	-.0074	-.0083	-.0128	-.0155	-.0182	-.0227	-.0414
100.000	-.0085	-.0085	-.0085	-.0085	-.0085	-.0085	-.0056	-.0065	-.0074	-.0065	-.0047	-.0074	-.0065	-.0083	-.0156
110.000	-.0146	-.0152	-.0134	-.0146	.3391	-.0158	-.0146	-.0128	-.0137	-.0128	-.0128	-.0101	-.0101	-.0101	-.0156
120.000						-.0134								-.0606	
130.000						-.0660								-.0606	
140.000						-.0588								-.0606	
150.000						-.0669								-.0615	
160.000						-.0660								-.0615	
170.000						-.0678								-.0624	
180.000	-.0553	-.0553	-.0553	-.0566	-.0572	-.0570	-.0570	-.0588	-.0597	-.0597	-.0615	-.0624	-.0633	-.0624	-.0593

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0613		
70.000							-.0652	-.0626	-.0593
80.000							-.0659	-.0659	-.0600
90.000	-.0401	-.0494	-.0547	-.0586	-.0606	-.0586	-.0606	-.0593	-.0500
100.000	-.0143	-.0222	-.0275	-.0335	-.0388	-.0361			
110.000	-.0103	-.0189	-.0196	-.0215	-.0098	.0877			
120.000						.1606			
130.000						.0738			
140.000						-.0527			
150.000						-.0500			
160.000						-.0527			
170.000						-.0580			
180.000	-.0560	-.0540	-.0533	-.0513	-.0500	-.0295			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4005)

OA64 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (8) = 20.980 RN/L = 3.5000 BETA = -2.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.1634	.1499	.1258												
70.000	.1052	.1252	.1122												
60.000	.0864	.0852	.0981												
90.000			.0652	.0558	.0235	.0041	.0017	.0012	.0006	.0000	.0000	-.0006	-.0017	-.0005	-.0017
100.000						-.0030	-.0041	-.0041	-.0047	-.0059	-.0053	-.0047	-.0054	-.0054	-.0054
110.000						-.0229	-.0153	-.0129	-.0124	-.0129	-.0147	-.0126	-.0126	-.0126	-.0126
120.000						-.0288								-.0675	
130.000						-.0394								-.0663	
140.000						-.0576								-.0663	
150.000						-.0611								-.0657	
160.000						-.0600								-.0645	
170.000						-.0576								-.0627	
180.000						-.0564	-.0564	-.0553	-.0547	-.0547	-.0541	-.0530	-.0536	-.0543	-.0543

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0017	-.0017	-.0005	-.0005	.0001	-.0017	-.0006	-.0051	-.0078	-.0078	-.0150	-.0194	-.0257	-.0302	-.0453
100.000	-.0054	-.0060	-.0060	-.0054	-.0048	-.0042	-.0024	-.0024	-.0033	-.0033	-.0033	-.0060	-.0078	-.0096	-.0161
110.000	-.0120	-.0108	-.0108	-.0114	.0526	-.0120	-.0105	-.0105	-.0087	-.0087	-.0087	-.0060	-.0069	-.0087	-.0116
120.000						-.0005								-.0589	
130.000						-.0634								-.0580	
140.000						-.0535								-.0598	
150.000						-.0634								-.0598	
160.000						-.0643								-.0589	
170.000						-.0661								-.0598	
180.000	-.0543	-.0543	-.0545	-.0555	-.0555	-.0562	-.0571	-.0580	-.0598	-.0607	-.0616	-.0598	-.0616	-.0607	-.0544

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9430
PHI									
80.000							-.0565		
70.000							-.0602	-.0569	-.0524
80.000							-.0615	-.0602	-.0544
90.000	-.0440	-.0511	-.0556	-.0582	-.0602	-.0563	-.0582	-.0479	-.0492
100.000	-.0135	-.0239	-.0310	-.0375	-.0420	-.0414			
110.000	-.0077	-.0142	-.0187	-.0207	-.0084	.0700			
120.000						.1503			
130.000						.0771			
140.000						-.0479			
150.000						-.0466			
160.000						-.0472			
170.000						-.0518			
180.000	-.0518	-.0511	-.0505	-.0466	-.0479	-.0259			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (R04006) (03 JAN 74)

OA64 ORBITER ENTRY CONFIGURATION

REFERENCE DATA

PARAMETRIC DATA

BETA = -4.000 ELEVON = -15.000

SREF = .0000 SQ.IN. XMRP = .0000 IN.
LREF = .0000 IN. YMRP = .0000 IN.
BREF = .0000 IN. ZMRP = .0000 IN.
SCALE = .0150 SCALE

MACH (1) = 2.500 ALPHA (1) = 8.000 RN/L = 2.4992 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2521	.1850	.1690												
70.000	.2419	.2157	.1734												
80.000	.2230	.2127	.1763												
90.000			.1909	.1310	.0347	.0031	.0031	.0061	.0091	.0137	.0137	.0137	.0133	.0100	.0049
100.000						.0076	.0076	.0091	.0091	.0091	.0091	.0076	.0049	.0033	-.0035
110.000						.0318	.0243	.0152	.0075	-.0075	-.0151	-.0186	-.0219	-.0253	-.0270
120.000						.0479								-.1076	
130.000						-.0272								-.1211	
140.000						-.1181								-.1194	
150.000						-.1271								-.1110	
160.000						-.1226								-.1110	
170.000						-.1226								-.0992	
180.000						-.1241	-.1181	-.1135	-.1090	-.1029	-.0984	-.0973	-.0925	-.0908	-.0858

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0049	.0018	.0016	.0033	.0049	.0016	-.0019	-.0049	-.0095	-.0095	-.0080	-.0034	-.0034	-.0019	-.0118
100.000	-.0068	-.0085	-.0102	-.0135	-.0135	-.0135	-.0126	-.0157	-.0203	-.0203	-.0233	-.0203	-.0126	-.0126	-.0134
110.000	-.0270	-.0287	-.0337	-.0354	-.0135	-.0404	-.0432	-.0402	-.0402	-.0432	-.0432	-.0417	-.0402	-.0371	-.0368
120.000						-.1412								-.1397	
130.000						-.1198								-.1489	
140.000						-.0984								-.0785	
150.000						-.0831								-.0739	
160.000						-.0754								-.0631	
170.000						-.0708								-.0524	
180.000	-.0824	-.0791	-.0774	-.0740	-.0707	-.0677	-.0616	-.0570	-.0509	-.0432	-.0432	-.0417	-.0402	-.0448	-.0430

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.0664		
80.000							-.0586	-.0446	-.0383
70.000							-.0368	-.0134	-.0352
80.000							.0069	.0084	-.0321
90.000	-.0198	-.0430	-.0524	-.0602	-.0602	-.0617			
100.000	-.0181	-.0352	-.0430	-.0571	-.0586	-.0820			
110.000	-.0290	-.0477	-.0571	-.0602	-.0446	.1414			
120.000						.2667			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4006)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (1) = 8.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
130.000						.2163			
140.000						.0116			
150.000						.0303			
160.000						.1169			
170.000						.0736			
180.000	-.0290	-.0383	-.0399	-.0056	.1024	.2264			

MACH (1) = 2.500 ALPHA (2) = 10.010 RN/L = 2.4992 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2499	.1938	.1705												
70.000	.2245	.2084	.1705												
80.000	.1962	.1937	.1676												
90.000			.1749	.1209	.0303	.0012	-.0003	.0043	.0073	.0089	.0104	.0089	.0082	.0065	.0048
100.000						.0058	.0058	.0073	.0073	.0073	.0058	.0058	.0014	-.0020	-.0053
110.000						.0196	.0150	.0089	.0043	-.0049	-.0110	-.0138	-.0189	-.0239	-.0290
120.000						.0377								-.1254	
130.000						-.0355								-.1356	
140.000						-.1275								-.1373	
150.000						-.1382								-.1271	
160.000						-.1367								-.1203	
170.000						-.1336								-.1085	
180.000						-.1336	-.1290	-.1244	-.1198	-.1137	-.1106	-.1051	-.1000	-.0984	-.0933

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0048	.0048	.0065	.0048	.0048	-.0020	-.0024	-.0071	-.0118	-.0102	-.0071	-.0040	.0038	.0038	-.0105
100.000	-.0087	-.0104	-.0104	-.0087	-.0087	-.0121	-.0134	-.0165	-.0196	-.0212	-.0227	-.0196	-.0134	-.0087	-.0138
110.000	-.0358	-.0358	-.0358	-.0358	-.0104	-.0341	-.0368	-.0385	-.0399	-.0430	-.0430	-.0446	-.0414	-.0385	-.0356
120.000						-.1609								-.1522	
130.000						-.1506								-.1522	
140.000						-.1381								-.1600	
150.000						-.1038								-.0960	
160.000						-.0867								-.0648	
170.000						-.0742								-.0539	
180.000	-.0899	-.0885	-.0781	-.0784	-.0713	-.0664	-.0633	-.0601	-.0570	-.0539	-.0524	-.0461	-.0492	-.0508	-.0513

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									

DATE 24 JAN 74 TABULATED SURFACE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4006)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (2) = 10.010

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0795		
70.000							-.0654	-.0591	-.0576
80.000							-.0513	-.0293	-.0482
90.000	-.0262	-.0403	-.0513	-.0623	-.0670	-.0701	.0021	-.0058	-.0434
100.000	-.0183	-.0403	-.0486	-.0607	-.0670	-.0717			
110.000	-.0325	-.0513	-.0391	-.0654	-.0623	.1342			
120.000						.2279			
130.000						.1342			
140.000						-.0513			
150.000						-.0591			
160.000						.1385			
170.000						.0866			
180.000	-.0419	-.0513	-.0497	-.0450	.0607	.2308			

MACH (1) = 2.500 ALPHA (3) = 12.000 RN/L = 2.4992 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2439	.1796	.1708												
70.000	.2088	.2044	.1684												
80.000	.1752	.1354	.1620												
90.000			.1606	.1109	.0256	-.0035	-.0035	.0011	.0027	.0042	.0042	.0057	.0061	.0061	.0045
100.000						-.0020	.0011	.0027	.0027	.0027	.0027	-.0004	-.0026	-.0026	-.0045
110.000						.0165	.0104	.0042	-.0004	-.0081	-.0113	-.0181	-.0215	-.0250	-.0284
120.000						.0289								-.1423	
130.000						-.0405								-.1492	
140.000						-.1361								-.1492	
150.000						-.1484								-.1423	
160.000						-.1469								-.1320	
170.000						-.1422								-.1199	
180.000						-.1422	-.1376	-.1330	-.1284	-.1237	-.1191	-.1147	-.1113	-.1078	-.1009

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0081	.0043	.0045	.0043	.0009	-.0008	-.0042	-.0073	-.0089	-.0089	-.0089	-.0057	.0021	.0037	-.0107
100.000	-.0043	-.0080	-.0060	-.0077	-.0095	-.0112	-.0136	-.0167	-.0198	-.0198	-.0214	-.0214	-.0136	-.0089	-.0123
110.000	-.0302	-.0319	-.0302	-.0319	-.0112	-.0371	-.0355	-.0387	-.0402	-.0434	-.0450	-.0450	-.0402	-.0387	-.0359
120.000						-.1682								-.1579	
130.000						-.1705								-.1579	
140.000						-.1595								-.1579	
150.000						-.1501								-.1658	

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1083) (RQ4C06)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (3) = 12.000

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI														-.1281	
160.000						-.1454								-.0638	
170.000						-.0716									
180.000	-.0940	-.0923	-.0871	-.0819	-.0785	-.0701	-.0654	-.0591	-.0544	-.0512	-.0512	-.0512	-.0544	-.0544	-.0533

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.1070		
60.000							-.0849	-.0833	-.0802
70.000							-.0581	-.0407	-.0612
80.000						-.0770	-.0138	-.0138	-.0549
90.000	-.0249	-.0423	-.0517	-.0644	-.0707	-.0770			
100.000	-.0170	-.0375	-.0488	-.0596	-.0644	.1343			
110.000	-.0312	-.0517	-.0612	-.0675	-.0612	.2093			
120.000						.1084			
130.000						-.0502			
140.000						-.0628			
150.000						.0550			
160.000						.0019			
170.000						.2958			
180.000	-.0438	-.0517	-.0549	-.0565	.0334				

MACH (1) = 2.500 ALPHA (4) = 14.000 RN/L = 2.4992 BETA = -4.0200

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2361	.1529	.1719												
70.000	.1923	.1967	.1646												
80.000	.1500	.1704	.1344												
90.000			.1427	.0989	.0224	-.0074	-.0074	-.0043	-.0027	-.0011	-.0011	.0020	.0042	.0042	.0008
100.000						-.0090	-.0058	-.0058	-.0027	-.0027	-.0043	-.0027	-.0027	-.0027	.0008
110.000						.0036	.0020	-.0043	-.0090	-.0152	-.0184	-.0216	-.0216	-.0234	-.0251
120.000						.0099								-.1596	
130.000						-.0513								-.1596	
140.000						-.1454								-.1596	
150.000						-.1596								-.1527	
160.000						-.1580								-.1424	
170.000						-.1533								-.1286	
180.000						-.1501	-.1470	-.1423	-.1376	-.1329	-.1266	-.1217	-.1148	-.1096	-.1027

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

OA64 ORBITER ENTRY CONFIGURATION (RQ4006)

MACH (1) = 2.300 ALPHA (4) = 14.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0025	.0025	.0042	-.0010	.0008	-.0027	-.0049	-.0081	-.0129	-.0129	-.0097	-.0081	-.0017	.0015	-.0145
100.000	-.0027	-.0044	-.0061	-.0061	-.0079	-.0113	-.0129	-.0177	-.0129	-.0209	-.0209	-.0225	-.0177	-.0129	-.0113
110.000	-.0268	-.0285	-.0285	-.0320	-.0096	-.0354	-.02	-.0385	-.0417	-.0433	-.0449	-.0449	-.0433	-.0417	-.0385
120.000						-.1751								-.1599	
130.000						-.1806								-.1599	
140.000						-.1934								-.1663	
150.000						-.1519								-.1791	
160.000						-.1679								-.1838	
170.000						-.0784								-.1136	
180.000	-.1010	-.0958	-.0872	-.0820	-.0768	-.0720	-.0672	-.0672	-.0656	-.0688	-.0688	-.0688	-.0656	-.0672	-.0704

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1391		
70.000							-.1056	-.1183	-.1168
80.000							-.0720	-.0768	-.0688
90.000	-.0289	-.0497	-.0704	-.0736	-.0800	-.0624	-.0513	-.0305	-.0497
100.000	-.0209	-.0401	-.0497	-.0624	-.0672	-.0624			
110.000	-.0321	-.0529	-.0608	-.0656	-.0576	.1642			
120.000						.1944			
130.000						.0865			
140.000						-.0720			
150.000						-.0465			
160.000						.0126			
170.000						-.0784			
180.000	-.0824	-.0736	-.0768	-.0816	-.0209	.2909			

MACH (1) = 2.300 ALPHA (5) = 15.990 RN/L = 2.4992 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2328	.1338	.1759												
70.000	.1774	.1920	.1613												
80.000	.1322	.1584	.15 1												
90.000			.1278	.0913	.0188	-.0116	-.0116	-.0084	-.0068	-.0036	-.0020	.0028	.0014	-.0005	-.0039
100.000						-.0163	-.0147	-.0116	-.0084	-.0084	-.0052	-.0036	-.0039	-.0003	-.0039
110.000						-.0116	-.0116	-.0132	-.0147	-.0179	-.0227	-.0233	-.0233	-.0253	-.0251
120.000						-.0056								-.1843	
130.000						-.0362								-.1755	
140.000						-.1536								-.1755	
150.000						-.1679								-.1666	

OA64 ORBITER ENTRY CONFIGURATION (RQ4006)

MACH (1) = 2.950 ALPHA (5) = 15.990

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
180.000						-.1679								-.1631	
170.000						-.1600								-.1543	
160.000						-.1584	-.1552	-.1504	-.1440	-.1376	-.1328	-.1277	-.1189	-.1153	-.1118

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0021	-.0021	-.0003	-.0021	-.0021	-.0039	-.0084	-.0084	-.0084	-.0132	-.0100	-.0084	-.0084	-.0036	-.0208
100.000	-.0039	-.0074	-.0003	-.0056	-.0109	-.0127	-.0132	-.0163	-.0179	-.0195	-.0179	-.0195	-.0132	-.0100	-.0141
110.000	-.0289	-.0288	-.0304	-.0304	-.0092	-.0339	-.0339	-.0371	-.0403	-.0419	-.0419	-.0419	-.0387	-.0371	-.0360
120.000						-.1773								-.1568	
130.000						-.1791								-.1568	
140.000						-.1951								-.1568	
150.000						-.1871								-.1727	
160.000						-.1695								-.1711	
170.000						-.1520								-.1616	
180.000	-.1089	-.1012	-.0941	-.0888	-.0833	-.0818	-.0818	-.0818	-.0818	-.0850	-.0834	-.0802	-.0850	-.0881	-.1002

X/L	.7290	.7470	.7870	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1728		
70.000							-.1559	-.1593	-.1559
80.000							-.1087	-.1087	-.1103
90.000	-.0380	-.0580	-.0766	-.0884	-.0951	-.0816	-.0698	-.0597	-.0749
100.000	-.0242	-.0445	-.0580	-.0681	-.0766	-.07[illegible]9			
110.000	-.0327	-.0583	-.0580	-.0681	-.0766	.1407			
120.000						.1810			
130.000						.0675			
140.000						-.0799			
150.000						-.0394			
160.000						-.0141			
170.000						-.1053			
180.000	-.0951	-.1053	-.1120	-.1154	-.0546	.2571			

OA64 ORBITER ENTRY CONFIGURATION (RQ4006)

MACH (1) = 2.500 ALPHA (6) = 18.000 RN/L = 2.4992 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.2295	.1188	.1800												
70.000	.1810	.1887	.1654												
80.000	.1115	.1436	.1508												
90.000			.1144	.0868	.0174	-.0108	-.0090	-.0075	-.0059	-.0044	-.0013	.0003	-.0015	-.0015	-.0032
100.000						-.0199	-.0168	-.0137	-.0106	-.0106	-.0090	-.0059	-.0050	-.0032	-.0032
110.000						-.0293	-.0231	-.0215	-.0215	-.0231	-.0246	-.0223	-.0223	-.0223	-.0240
120.000						-.0215								-.1974	
130.000						-.0635								-.1870	
140.000						-.1554								-.1748	
150.000						-.1710								-.1748	
160.000						-.1694								-.1696	
170.000						-.1616								-.1644	
180.000						-.1585	-.1538	-.1492	-.1445	-.1383	-.1305	-.1246	-.1159	-.1142	-.1107

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0015	-.0015	-.0015	-.0015	-.0015	-.0032	-.0064	-.0080	-.0111	-.0095	-.0127	-.0127	-.0127	-.0111	-.0292
100.000	-.0067	-.0067	-.0015	-.0015	-.0050	-.0084	-.0111	-.0127	-.0127	-.0158	-.0127	-.0127	-.0127	-.0111	-.0132
110.000	-.0240	-.0258	-.0258	-.0258	-.0067	-.0310	-.0300	-.0348	-.0348	-.0363	-.0379	-.0363	-.0332	-.0332	-.0292
120.000						-.1783								-.1577	
130.000						-.1781								-.1577	
140.000						-.1908								-.1577	
150.000						-.1908								-.1687	
160.000						-.1718								-.1687	
170.000						-.1734								-.1687	
180.000	-.1107	-.1090	-.1055	-.1003	-.1055	-.1025	-.1104	-.1151	-.1104	-.1135	-.1120	-.1120	-.1104	-.1151	-.1169

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1759		
70.000							-.1759	-.1775	-.1552
80.000							-.1440	-.1297	-.1329
90.000	-.0483	-.0738	-.0898	-.1010	-.1089	-.0994	-.0914	-.0611	-.1026
100.000	-.0278	-.0483	-.0595	-.0707	-.0802	-.0930			
110.000	-.0278	-.0483	-.0611	-.0691	-.0738	.1205			
120.000						.1780			
130.000						.0573			
140.000						-.0611			
150.000						-.0372			
160.000						-.0132			
170.000						-.0930			
180.000	-.1121	-.1185	-.1217	-.1233	-.0738	.2656			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(RQ4006)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.900 ALPHA (7) = 20.000 RN/L = 2.4992 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI															
80.000	.2241	.0973	.1818												
70.000	.1485	.1318	.1643												
60.000	.0914	.1308	.1454												
90.000			.0987	.0783	.0145	-.0120	-.0104	-.0088	-.0057	-.0042	-.0042	-.0026	-.0013	-.0030	-.0030
100.000						-.0260	-.0229	-.0182	-.0151	-.0135	-.0120	-.0104	-.0065	-.0082	-.0030
110.000						-.0540	-.0400	-.0338	-.0307	-.0307	-.0291	-.0273	-.0256	-.0238	-.0256
120.000						-.0478								-.2078	
130.000						-.0727								-.2025	
140.000						-.1600								-.1887	
150.000						-.1771								-.1748	
160.000						-.1756								-.1765	
170.000						-.1678								-.1783	
180.000						-.1631	-.1584	-.1538	-.1475	-.1397	-.1320	-.1245	-.1193	-.1210	-.1158

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0015	-.0013	.0004	-.0013	-.0013	-.0030	-.0016	-.0032	-.0064	-.0064	-.0080	-.0079	-.0207	-.0270	-.0556
100.000	-.0150	-.0082	-.0013	-.0065	-.0065	-.0082	-.0080	-.0080	-.0080	-.0064	-.0096	-.0064	-.0032	-.0064	-.0191
110.000	-.0256	-.0273	-.0238	-.0256	-.0065	-.0273	-.0270	-.0286	-.0302	-.0302	-.0286	-.0286	-.0239	-.0255	-.0270
120.000						-.1835								-.1429	
130.000						-.1857								-.1508	
140.000						-.1841								-.1524	
150.000						-.1889								-.1762	
160.000						-.1905								-.1762	
170.000						-.1841								-.1778	
180.000	-.1193	-.1193	-.1175	-.1227	-.1245	-.1302	-.1286	-.1365	-.1365	-.1302	-.1270	-.1270	-.1302	-.1318	-.1334

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1810		
70.000							-.1889	-.1714	-.1429
80.000							-.1699	-.1587	-.1540
90.000	-.0782	-.0984	-.1143	-.1270	-.1365	-.1302	-.1318	-.1064	-.1238
100.000	-.0334	-.0588	-.0715	-.0873	-.1064	-.1223			
110.000	-.0318	-.0572	-.0699	-.0715	-.0762	.0921			
120.000						.1769			
130.000						.0633			
140.000						-.0477			
150.000						-.0524			
160.000						-.0112			
170.000						-.0540			
180.000	-.1270	-.1286	-.1318	-.1238	-.0731	.2445			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

OA84 ORBITER ENTRY CONFIGURATION (RQ4006)

MACH (I) = 2.500 ALPHA (8) = 20.990 RN/L = 2.4992 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4510
PHI															
60.000	.2210	.0826	.1817												
70.000	.1365	.1775	.1628												
80.000	.0797	.1190	.1409												
90.000			.0914	.0753	.0145	-.0120	-.0120	-.0073	-.0042	-.0027	-.0027	-.0011	-.0016	-.0016	-.0033
100.000						-.0276	-.0229	-.0214	-.0167	-.0136	-.0120	-.0089	-.0085	-.0103	-.0103
110.000						-.0681	-.0478	-.0383	-.0323	-.0323	-.0307	-.0278	-.0260	-.0278	-.0260
120.000						-.0603								-.2129	
130.000						-.0806								-.2059	
140.000						-.1663								-.2041	
150.000						-.1803								-.1762	
160.000						-.1772								-.1797	
170.000						-.1694								-.1832	
180.000						-.1663	-.1600	-.1553	-.1476	-.1398	-.1320	-.1255	-.1255	-.1255	-.1203

X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0033	-.0016	.0002	.0019	.0019	-.0016	-.0013	-.0029	-.0060	-.0091	-.0154	-.0248	-.0311	-.0389	-.0705
100.000	-.0033	-.0065	-.0068	-.0051	-.0051	-.0068	-.0060	-.0029	-.0060	-.0060	-.0044	-.0060	-.0060	-.0107	-.0274
110.000	-.0278	-.0260	-.0243	-.0243	-.0051	-.0260	-.0248	-.0264	-.0248	-.0264	-.0248	-.0232	-.0217	-.0217	-.0274
120.000						-.1936								-.1330	
130.000						-.1878								-.1439	
140.000						-.1894								-.1721	
150.000						-.1925								-.1800	
160.000						-.1957								-.1815	
170.000						-.1847								-.1784	
180.000	-.1273	-.1273	-.1273	-.1290	-.1343	-.1361	-.1392	-.1408	-.1361	-.1361	-.1361	-.1330	-.1345	-.1377	-.1408

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1855		
70.000							-.1919	-.1727	-.1504
80.000							-.1807	-.1711	-.1615
90.000	-.0929	-.1136	-.1344	-.1360	-.1488	-.1456	-.1456	-.1248	-.1344
100.000	-.0418	-.0689	-.0849	-.1009	-.1136	-.1408			
110.000	-.0322	-.0628	-.0855	-.0769	-.0801	.0675			
120.000						.1823			
130.000						.0704			
140.000						-.0450			
150.000						-.0674			
160.000						-.0099			
170.000						-.0338			
180.000	-.1328	-.1344	-.1360	-.1232	-.0705	.2268			

OA64 ORBITER ENTRY CONFIGURATION (RQ4006)

MACH (2) = 2.950 ALPHA (1) = 0.000 RN/L = 2.5137 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2541	.1904	.1708												
70.000	.2443	.2100	.1725												
80.000	.2283	.2118	.1741												
90.000			.1855	.1335	.0424	.0149	.0114	.0131	.0166	.0149	.0131	.0149	.0108	.0108	.0070
100.000						.0183	.0166	.0166	.0131	.0114	.0114	.0114	.0089	.0051	.0051
110.000						.0321	.0252	.0217	.0183	.0063	.0011	-.0044	-.0082	-.0101	-.0128
120.000						.0562								-.0805	
130.000						-.0041								-.0900	
140.000						-.0798								-.0938	
150.000						-.0901								-.0900	
160.000						-.0901								-.0900	
170.000						-.0901								-.0843	
180.000						-.0919	-.0867	-.0833	-.0833	-.0815	-.0798	-.0805	-.0805	-.0805	-.0729

X/L	.4900	.4880	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0051	.0051	.0032	.0032	.0051	.0051	.0041	.0006	-.0047	-.0064	-.0047	-.0047	.0023	.0023	-.0022
100.000	-.0008	-.0044	-.0044	-.0063	-.0063	-.0063	-.0064	-.0064	-.0099	-.0064	-.0117	-.0134	-.0117	-.0099	-.0124
110.000	-.0140	-.0178	-.0197	-.0235	-.0044	-.0273	-.0275	-.0275	-.0275	-.0257	-.0275	-.0292	-.0275	-.0310	-.0283
120.000						-.1033								-.1011	
130.000						-.0976								-.1011	
140.000						-.0923								-.1011	
150.000						-.0800								-.0748	
160.000						-.0713								-.0678	
170.000						-.0643								-.0590	
180.000	-.0729	-.0710	-.0672	-.0653	-.0634	-.0643	-.0608	-.0590	-.0555	-.0520	-.0502	-.0502	-.0502	-.0502	-.0492

X/L	.7290	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
80.000							-.0405		
70.000							-.0335	-.0248	-.0196
80.000							-.0213	.0013	-.0056
90.000	-.0022	-.0143	-.0248	-.0387	-.0387	-.0353	.0187	.0222	.0048
100.000	-.0098	-.0109	-.0178	-.0333	-.0300	-.0544			
110.000	-.0198	-.0231	-.0265	-.0335	-.0283	.1460			
120.000						.2474			
130.000						.1846			
140.000						-.0283			
150.000						.0205			
160.000						.0623			
170.000						.0275			
180.000	-.0405	-.0440	-.0457	-.0387	.0292	.1493			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4006)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.990 ALPHA (2) = 9.990 BN/L = 2.5137 BETA = -4.0200

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
90.000	.2478	.1988	.1692												
70.000	.2264	.2035	.1692												
80.000	.2019	.1970	.1675												
90.000			.1708	.1197	.0961	.0100	.0065	.0083	.0100	.0100	.0085	.0083	.0042	.0042	.0023
100.000						.0100	.0117	.0100	.0083	.0065	.0048	.0048	.0004	.0004	-.0053
110.000						.0257	.0187	.0117	.0065	-.0004	-.0039	-.0053	-.0111	-.0130	-.0187
120.000						.0413								-.0914	
130.000						-.0144								-.1010	
140.000						-.0893								-.1048	
150.000						-.1015								-.1010	
160.000						-.1032								-.0991	
170.000						-.0997								-.0934	
180.000						-.1015	-.0980	-.0945	-.0928	-.0928	-.0893	-.0895	-.0876	-.0876	-.0838

X/L	.4500	.4680	.4830	.5030	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0023	.0042	.0042	.0042	.0042	.0042	.0030	-.0022	-.0039	-.0057	-.0057	-.0039	.0013	.0030	.0005
100.000	-.0053	-.0053	-.0053	-.0053	-.0053	-.0053	-.0039	-.0039	-.0109	-.0057	-.0144	-.0144	-.0126	-.0109	-.0065
110.000	-.0208	-.0245	-.0245	-.0245	.0004	-.0245	-.0213	-.0231	-.0248	-.0266	-.0301	-.0318	-.0301	-.0318	-.0292
120.000						-.1201								-.1137	
130.000						-.1102								-.1171	
140.000						-.1049								-.1171	
150.000						-.1049								-.1258	
160.000						-.0893								-.0788	
170.000						-.0736								-.0510	
180.000	-.0800	-.0781	-.0723	-.0723	-.0704	-.0666	-.0649	-.0614	-.0579	-.0562	-.0527	-.0492	-.0475	-.0475	-.0468

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0625		
70.000							-.0468	-.0363	-.0328
80.000							-.0275	-.0100	-.0152
90.000	-.0030	-.0205	-.0345	-.0415	-.0415	-.0380	.0110	.0146	-.0065
100.000	-.0090	-.0187	-.0205	-.0292	-.0398	-.0415			
110.000	-.0187	-.0275	-.0328	-.0328	-.0398	.1476			
120.000						.2281			
130.000						.1412			
140.000						-.0660			
150.000						-.0240			
160.000						.0233			
170.000						-.0275			
180.000	-.0580	-.0415	-.0450	-.0415	.0338	.1782			

OA84 ORBITER ENTRY CONFIGURATION (R04006)

MACH (2) = 2.950 ALPHA (3) = 12.020 RN/L = 2.5137 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2594	.1822	.1708												
70.000	.2100	.1969	.1658												
80.000	.1775	.1622	.1609												
90.000			.1560	.1110	.0343	.0065	.0030	.0047	.0047	.0047	.0047	.0047	.0023	.0023	.0042
100.000						.0065	.0065	.0047	.0047	.0013	.0013	-.0005	-.0035	-.0055	-.0054
110.000						.0169	.0117	.0065	.0013	-.0057	-.0092	-.0130	-.0168	-.0168	-.0188
120.000						.0256								-.1049	
130.000						-.0214								-.1087	
140.000						-.0962								-.1125	
150.000						-.1102								-.1068	
160.000						-.1102								-.1049	
170.000						-.1067								-.1029	
180.000						-.1067	-.1050	-.1015	-.0997	-.0980	-.0980	-.0953	-.0934	-.0915	-.0838

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5900	.5990	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0042	.0023	.0042	.0023	.0042	.0023	.0005	-.0047	-.0065	-.0065	-.0065	-.0047	-.0012	.0005	-.0012
100.000	-.0054	-.0015	-.0015	-.0035	-.0054	-.0054	-.0065	-.0083	-.0118	-.0135	-.0135	-.0135	-.0135	-.0135	-.0100
110.000	-.0207	-.0207	-.0207	-.0188	.0023	-.0226	-.0223	-.0240	-.0258	-.0275	-.0293	-.0328	-.0293	-.0310	-.0293
120.000						-.1240								-.1099	
130.000						-.1239								-.1099	
140.000						-.1221								-.1099	
150.000						-.1151								-.1221	
160.000						-.1204								-.1204	
170.000						-.0853								-.1099	
180.000	-.0819	-.0781	-.0781	-.0782	-.0742	-.0713	-.0661	-.0661	-.0626	-.0373	-.0555	-.0591	-.0591	-.0626	-.0626

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0853		
70.000							-.0608	-.0485	-.0555
80.000							-.0363	-.0223	-.0240
90.000	-.0083	-.0205	-.0328	-.0415	-.0450	-.0398	-.0100	.0075	-.0135
100.000	-.0083	-.0170	-.0205	-.0293	-.0415	-.0398			
110.000	-.0223	-.0293	-.0328	-.0310	-.0398	.1765			
120.000						.2152			
130.000						.1144			
140.000						-.0801			
150.000						-.0398			
160.000						-.0450			
170.000						-.0678			
180.000	-.0320	-.0373	-.0608	-.0645	-.003	.2715			

OA84 ORBITER ENTRY CONFIGURATION (R04008)

MACH (2) = 2.950 ALPHA (4) = 14.010 RN/L = 2.5157 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2359	.1592	.1756												
70.000	.1988	.1951	.1658												
80.000	.1576	.1723	.1592												
90.000			.1446	.1019	.0221	-.0064	-.0102	-.0102	-.0083	-.0083	-.0064	-.0064	-.0064	-.0063	-.0084
100.000						-.0083	-.0102	-.0102	-.0102	-.0121	-.0102	-.0121	-.0146	-.0146	-.0125
110.000						-.0026	-.0083	-.0121	-.0159	-.0216	-.0235	-.0271	-.0291	-.0291	-.0291
120.000						.0031								-.1413	
130.000						-.0406								-.1372	
140.000						-.1204								-.1392	
150.000						-.1356								-.1330	
160.000						-.1356								-.1330	
170.000						-.1318								-.1309	
180.000						-.1318	-.1280	-.1261	-.1242	-.1223	-.1185	-.1185	-.1143	-.1143	-.1081

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0084	-.0105	-.0084	-.0105	-.0084	-.0105	-.0102	-.0140	-.0159	-.0178	-.0140	-.0140	-.0102	-.0083	-.0119
100.000	-.0125	-.0125	-.0167	-.0167	-.0167	-.0167	-.0102	-.0159	-.0197	-.0178	-.0216	-.0216	-.0197	-.0197	-.0178
110.000	-.0291	-.0291	-.0291	-.0312	-.0105	-.0354	-.0330	-.0349	-.0349	-.0368	-.0406	-.0387	-.0368	-.0406	-.0412
120.000						-.1475								-.1394	
130.000						-.1471								-.1394	
140.000						-.1566								-.1375	
150.000						-.1433								-.1509	
160.000						-.1394								-.1509	
170.000						-.1433								-.1528	
180.000	-.1080	-.1080	-.1039	-.1039	-.1018	-.1014	-.0957	-.0976	-.0957	-.0976	-.0957	-.0976	-.1014	-.0995	-.1037

X/L	.7230	.7470	.7670	.7850	.8050	.8290	.8620	.9000	.9400
PHI									
80.000							-.1310		
70.000							-.1037	-.0998	-.1076
80.000							-.0646	-.0646	-.0490
90.000	-.0197	-.0397	-.0549	-.0568	-.0705	-.0549	-.0451	-.0090	-.0334
100.000	-.0158	-.0314	-.0373	-.0490	-.0549	-.0329			
110.000	-.0334	-.0412	-.0471	-.0471	-.0471	.1973			
120.000						.2086			
130.000						.0915			
140.000						-.1115			
150.000						-.0627			
160.000						-.0568			
170.000						-.0841			
180.000	-.0919	-.0900	-.0939	-.0939	-.0568	.2648			

OA64 ORBITER ENTRY CONFIGURATION (RQ4006)

MACH (2) = 2.950 ALPHA (5) = 16.000 RN/L = 2.5137 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0670	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2290	.1428	.1752												
70.000	.1801	.1866	.1638												
60.000	.1378	.1589	.1541												
50.000			.1312	.0966	.0283	.0021	.0003	.0021	.0003	.0003	.0003	.0036	.0021	.0021	.0021
100.000						-.0032	-.0049	-.0032	-.0032	-.0032	-.0032	-.0032	-.0017	-.0017	.0002
110.000						-.0067	-.0049	-.0067	-.0102	-.0137	-.0154	-.0170	-.0170	-.0151	-.0151
120.000						-.0032								-.1336	
130.000						-.0312								-.1259	
140.000						-.1064								-.1240	
150.000						-.1204								-.1202	
160.000						-.1204								-.1202	
170.000						-.1169								-.1183	
180.000						-.1152	-.1117	-.1082	-.1082	-.1064	-.1064	-.1011	-.1011	-.0992	-.0954

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0002	.0002	.0021	.0002	.0002	.0002	-.0006	-.0024	-.0041	-.0041	-.0041	-.0024	-.0006	.0011	-.0032
100.000	.0002	-.0055	-.0055	-.0036	-.0036	-.0055	-.0006	-.0024	-.0041	-.0041	-.0176	-.0093	-.0059	-.0059	-.0032
110.000	-.0151	-.0170	-.0170	-.0170	.0002	-.0189	-.0198	-.0215	-.0215	-.0233	-.0250	-.0233	-.0233	-.0235	-.0224
120.000						-.1298								-.1207	
130.000						-.1311								-.1207	
140.000						-.1398								-.1207	
150.000						-.1433								-.1328	
160.000						-.1224								-.1328	
170.000						-.1276								-.1328	
180.000	-.0954	-.0954	-.0954	-.1011	-.1011	-.1068	-.1068	-.1050	-.1050	-.1015	-.1015	-.1015	-.1033	-.1015	-.0977

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1187		
70.000							-.1117	-.1099	-.1099
60.000							-.0732	-.0749	-.0627
50.000	-.0137	-.0277	-.0399	-.0504	-.0574	-.0452	-.0399	.0038	-.0347
100.000	-.0032	-.0189	-.0242	-.0347	-.0399	-.0452			
110.000	-.0172	-.0189	-.0294	-.0329	-.0399	.1810			
120.000						.2067			
130.000						.0791			
140.000						-.0872			
150.000						-.0557			
160.000						-.0434			
170.000						-.0889			
180.000	-.0889	-.0889	-.0924	-.0942	-.0609	.1874			

OA64 ORBITER ENTRY CONFIGURATION (RQ4008)

MACH (2) = 2.950 ALPHA (6) = 16.000 RN/L = 2.5137 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2274	.1248	.1801												
70.000	.1671	.1850	.1638												
80.000	.1194	.1459	.1508												
90.000			.1211	.0914	.0284	.0021	.0004	.0039	.0021	.0009	.0039	.0056	.0024	.0024	-.0015
100.000						-.0066	-.0066	-.0066	-.0031	-.0031	-.0031	-.0014	-.0034	-.0053	-.0015
110.000						-.0189	-.0154	-.0136	-.0136	-.0154	-.0171	-.0189	-.0189	-.0170	-.0170
120.000						-.0189								-.1506	
130.000						-.0451								-.1429	
140.000						-.1134								-.1332	
150.000						-.1274								-.1293	
160.000						-.1257								-.1274	
170.000						-.1222								-.1312	
180.000						-.1187	-.1169	-.1134	-.1117	-.1099	-.1082	-.1080	-.1080	-.1080	-.1061

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	-.0015	-.0015	.0005	.0005	.0024	.0005	.0016	-.0002	-.0002	-.0002	-.0020	-.0002	-.0020	-.0020	-.0118
100.000	-.0053	-.0034	-.0053	-.0034	-.0034	-.0034	-.0002	-.0002	-.0020	-.0002	-.0037	-.0002	-.0002	-.0020	-.0030
110.000	-.0170	-.0170	-.0170	-.0170	-.0015	-.0189	-.0162	-.0162	-.0198	-.0198	-.0216	-.0198	-.0180	-.0180	-.0189
120.000						-.1370								-.1249	
130.000						-.1356								-.1249	
140.000						-.1392								-.1249	
150.000						-.1428								-.1321	
160.000						-.1463								-.1303	
170.000						-.1285								-.1303	
180.000	-.1080	-.1099	-.1080	-.1138	-.1157	-.1160	-.1196	-.1214	-.1232	-.1214	-.1214	-.1214	-.1178	-.1196	-.1128

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1270		
70.000							-.1287	-.1234	-.1004
80.000							-.1039	-.1039	-.0968
90.000	-.0280	-.0437	-.0581	-.0887	-.0738	-.0667	-.0632	-.0437	-.0561
100.000	-.0085	-.0224	-.0313	-.0402	-.0472	-.0632			
110.000	-.0118	-.0224	-.0295	-.0384	-.0437	.1633			
120.000						.2019			
130.000						.0679			
140.000						-.0986			
150.000						-.0650			
160.000						-.0650			
170.000						-.1039			
180.000	-.1022	-.1039	-.1039	-.0862	-.0667	.1344			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1083) (R04006)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (7) = 20.020 RN/L = 2.5137 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI															
60.000	.2225	.1057	.1817												
70.000	.1506	.1801	.1678												
80.000	.0985	.1329	.1492												
90.000			.1072	.0863	.0289	.0028	.0028	.0028	.0043	.0048	.0048	.0063	.0040	.0040	.0040
100.000						-.0076	-.0076	-.0076	-.0041	-.0059	-.0024	.0011	-.0017	-.0017	-.0017
110.000						-.0369	-.0267	-.0158	-.0107	-.0198	-.0180	-.0170	-.0151	-.0151	-.0151
120.000						-.0372								-.1527	
130.000						-.0598								-.1470	
140.000						-.1172								-.1431	
150.000						-.1311								-.1317	
160.000						-.1294								-.1278	
170.000						-.1241								-.1317	
180.000						-.1224	-.1189	-.1155	-.1172	-.1120	-.1102	-.1087	-.1106	-.1145	-.1184

X/L	.4500	.4680	.4860	.5030	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0040	.0040	.0040	.0040	.0078	.0059	.0056	.0038	.0038	.0038	.0003	-.0052	-.0049	-.0137	-.0304
100.000	-.0017	-.0017	-.0017	.0002	.0002	.0002	.0003	.0038	.0038	.0038	.0003	-.0014	.0038	.0003	-.0022
110.000	-.0151	-.0151	-.0132	-.0132	.0040	-.0132	-.0137	-.0137	-.0137	-.0137	-.0137	-.0137	-.0102	-.0102	-.0110
120.000						-.1393								-.1187	
130.000						-.1397								-.1187	
140.000						-.1379								-.1187	
150.000						-.1397								-.1309	
160.000						-.1432								-.1309	
170.000						-.1327								-.132?	
180.000	-.1184	-.1145	-.1145	-.1145	-.1164	-.1204	-.1204	-.1239	-.1257	-.1257	-.1239	-.1204	-.1187	-.1204	-.1168

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1307		
70.000							-.1360	-.1201	-.1078
80.000							-.1219	-.1166	-.1078
90.000	-.0480	-.0858	-.0794	-.0902	-.0955	-.0902	-.0867	-.0585	-.0814
100.000	-.0127	-.0321	-.0409	-.0532	-.0620	-.0849			
110.000	-.0110	-.0304	-.0392	-.0409	-.0480	.1344			
120.000						.1987			
130.000						.0700			
140.000						-.0590			
150.000						-.0691			
160.000						-.0620			
170.000						-.0849			
180.000	-.1131	-.1113	-.1008	-.0796	-.0708	.0806			

OA84 ORBITER ENTRY CONFIGURATION (R04006)

MACH (2) = 2.950 ALPHA (8) = 20.960 RN/L = 2.5137 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2182	.0854	.1823												
70.000	.1414	.1774	.1643												
80.000	.0854	.1249	.1483												
90.000			.0962	.0818	.0244	-.0008	-.0008	.0010	.0028	.0028	.0046	.0046	.0021	.0021	.0001
100.000						-.0133	-.0115	-.0097	-.0079	-.0061	-.0044	-.0026	-.0039	-.0039	-.0059
110.000						-.0528	-.0349	-.0277	-.0223	-.0241	-.0205	-.0197	-.0177	-.0177	-.0177
120.000						-.0528									
130.000						-.0744								-.1622	
140.000						-.1300								-.1582	
150.000						-.1444								-.1582	
160.000						-.1408								-.1444	
170.000						-.1354								-.1384	
180.000						-.1318	-.1300	-.1264	-.1247	-.1211	-.1193	-.1186	-.1208	-.1404	

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0001	.0001	.0040	.0040	.0060	.0040	.0039	.0021	.0003	.0003	-.0034	-.0106	-.0178	-.0250	-.0478
100.000	-.0039	-.0039	-.0039	-.0019	.0001	.0001	.0003	.0039	.0003	.0003	.0003	.0003	.0003	-.0034	-.0096
110.000	-.0197	-.0177	-.0157	-.0157	.0021	-.0157	-.0142	-.0142	-.0160	-.0160	-.0142	-.0124	-.0088	-.0106	-.0133
120.000						-.1503								-.1262	
130.000						-.1479								-.1262	
140.000						-.1479								-.1262	
150.000						-.1497								-.1371	
160.000						-.1515								-.1371	
170.000						-.1479								-.1389	
180.000	-.1268	-.1285	-.1285	-.1285	-.1305	-.1334	-.1352	-.1352	-.1334	-.1334	-.1316	-.1298	-.1280	-.1280	-.1260

X/L	.7290	.7470	.7870	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1405		
70.000							-.1460	-.1278	-.1133
80.000							-.1351	-.1278	-.1223
90.000	-.0847	-.0823	-.0951	-.1042	-.1096	-.1060	-.1042	-.0805	-.0969
100.000	-.0224	-.0423	-.0533	-.0678	-.0751	-.1023			
110.000	-.0133	-.0314	-.0423	-.0478	-.0551	.1122			
120.000						.2007			
130.000						.0722			
140.000						-.1060			
150.000						-.0751			
160.000						-.0696			
170.000						-.0951			
180.000	-.1223	-.1169	-.1060	-.0896	-.0823	.0795			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4006)

OA64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (1) = 7.990 RN/L = 3.4980 BETA = -4.0050

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2050	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2354	.1800	.1545												
70.000	.2280	.1917	.1545												
90.000	.2122	.1926	.1555												
90.000			.1634	.1154	.0458	.0223	.0174	.0155	.0155	.0135	.0126	.0116	.0090	.0069	.0058
100.000						.0233	.0204	.0174	.0145	.0116	.0106	.0096	.0058	.0048	.0027
110.000						.0321	.0243	.0194	.0145	.0077	.0037	.0016	-.0005	-.0018	-.0047
120.000						.0488								-.0417	
130.000						.0165								-.0512	
140.000						-.0374								-.0565	
150.000						-.0472								-.0565	
160.000						-.0491								-.0544	
170.000						-.0501								-.0534	
180.000						-.0511	-.0511	-.0511	-.0511	-.0511	-.0511	-.0512	-.0512	-.0523	-.0512

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0048	.0037	.0027	.0016	.0027	.0037	.0070	.0070	.0050	.0050	.0050	.0041	.0031	.0041	.0024
100.000	.0018	.0005	-.0005	-.0016	-.0037	-.0037	-.0008	.0002	.0002	.0050	.0011	.0002	.0002	-.0018	-.0045
110.000	-.0058	-.0079	-.0090	-.0100	.0153	-.0132	-.0105	-.0115	-.0115	-.0095	-.0095	-.0095	-.0086	-.0105	-.0114
120.000						-.0618								-.0523	
130.000						-.0572								-.0514	
140.000						-.0553								-.0514	
150.000						-.0523								-.0514	
160.000						-.0504								-.0514	
170.000						-.0475								-.0507	-.0420
180.000	-.0512	-.0502	-.0491	-.0491	-.0461	-.0446	-.0446	-.0455	-.0436	-.0426	-.0416	-.0407	-.0407		

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0281		
70.000							-.0124	-.0055	-.0045
80.000							-.0015	.0133	.0133
90.000	.0044	-.0015	-.0025	-.0035	-.0065	-.0094	.0212	.0340	.0251
100.000	-.0015	-.0035	-.0035	-.0025	-.0015	-.0143			
110.000	-.0114	-.0153	-.0153	-.0114	.0034	.1523			
120.000						.2274			
130.000						.1730			
140.000						-.0094			
150.000						-.0242			
160.000						-.0252			
170.000						-.0479			
180.000	-.0380	-.0420	-.0429	-.0410	-.0272	.0616			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1083) (RQ4006)

OA64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (2) = 10.010 RN/L = 3.4980 BETA = -4.0050

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2297	.1878	.1581												
70.000	.2139	.1878	.1551												
80.000	.1908	.1819	.1532												
90.000			.1551	.1086	.0433	.0196	.0146	.0126	.0117	.0097	.0087	.0077	.0051	.0041	.0019
100.000						.0186	.0156	.0136	.0107	.0087	.0067	.0057	.0030	.0009	-.0002
110.000						.0285	.0215	.0146	.0087	.0027	.0008	-.0023	-.0044	-.0065	-.0097
120.000						.0354								-.0522	
130.000						.0057								-.0585	
140.000						-.0438								-.0638	
150.000						-.0547								-.0617	
160.000						-.0566								-.0596	
170.000						-.0566								-.0596	
180.000						-.0576	-.0576	-.0576	-.0575	-.0576	-.0576	-.0575	-.0575	-.0575	-.0575

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0019	.0009	.0030	.0030	.0041	.0041	.0024	.0024	.0004	-.0005	-.0025	-.0025	-.0005	-.0005	.0014
100.000	-.0025	-.0023	-.0023	-.0023	-.0023	-.0012	-.0005	-.0015	-.0015	-.0005	-.0035	-.0055	-.0055	-.0074	-.0057
110.000	-.0108	-.0118	-.0118	-.0118	.0115	-.0129	-.0124	-.0124	-.0114	-.0114	-.0124	-.0124	-.0134	-.0153	-.0178
120.000						-.0734								-.0646	
130.000						-.0676								-.0636	
140.000						-.0646								-.0636	
150.000						-.0636								-.0656	
160.000						-.0636								-.0656	
170.000						-.0597								-.0686	
180.000	-.0584	-.0553	-.0553	-.0553	-.0553	-.0567	-.0567	-.0577	-.0577	-.0567	-.0567	-.0577	-.0607	-.0636	-.0661

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0429		
70.000							-.0198	-.0178	-.0157
80.000							-.0077	.0074	.0034
90.000	.0034	-.0047	-.0067	-.0107	-.0127	-.0147	.0155	.0296	.0165
100.000	-.0016	-.0037	-.0057	-.0057	-.0077	-.0107			
110.000	-.0147	-.0168	-.0147	-.0137	-.0097	.1605			
120.000						.2219			
130.000						.1344			
140.000						-.0319			
150.000						-.0450			
160.000						-.0399			
170.000						-.0550			
180.000	-.0851	-.0851	-.0611	-.0550	-.0470	.0759			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4006)

OA64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (3) = 12.000 RN/L = 3.4980 BETA = -4.0050

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2269	.1738	.1589												
70.000	.2000	.1838	.1529												
80.000	.1708	.1708	.1483											.0034	.0023
90.000			.1429	.1021	.0403	.0164	.0114	.0094	.0074	.0064	.0054	.0044	.0034	.0002	-.0009
100.000						.0144	.0114	.0094	.0064	.0044	.0034	.0014	.0012	-.0084	-.0094
110.000						.0193	.0124	.0094	.0044	-.0006	-.0036	-.0052	-.0073	-.0627	
120.000						.0223								-.0627	
130.000						-.0036								-.0680	
140.000						-.0514								-.0659	
150.000						-.0614								-.0637	
160.000						-.0634								-.0637	
170.000						-.0634								-.0605	-.0605
180.000						-.0634	-.0634	-.0634	-.0634	-.0624	-.0624	-.0605	-.0605	-.0605	-.0605

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0054	.0034	.0044	.0054	.0044	.0034	.0027	.0018	-.0002	-.0012	-.0022	-.0022	-.0002	.0018	.0014
100.000	-.0020	-.0009	-.0009	.0002	.0002	.0002	-.0002	-.0002	-.0012	-.0002	-.0022	-.0052	-.0052	-.0062	-.0057
110.000	-.0105	-.0105	-.0105	-.0105	.0140	-.0094	-.0101	-.0101	-.0101	-.0111	-.0121	-.0131	-.0141	-.0151	-.0168
120.000						-.0765								-.0715	
130.000						-.0744								-.0715	
140.000						-.0735								-.0735	
150.000						-.0705								-.0764	
160.000						-.0695								-.0794	
170.000						-.0695								-.0754	
180.000	-.0805	-.0816	-.0816	-.0627	-.0627	-.0655	-.0655	-.0665	-.0685	-.0715	-.0744	-.0754	-.0744	-.0794	-.0792

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0560		
70.000							-.0329	-.0309	-.0329
80.000							-.0117	-.0027	-.0006
90.000	.0044	-.0047	-.0087	-.0117	-.0147	-.0147	.0074	.0245	.0155
100.000	.0004	-.0047	-.0047	-.0077	-.0087	-.0077			
110.000	-.0127	-.0157	-.0137	-.0117	-.0097	.1716			
120.000						.2182			
130.000						.1132			
140.000						-.0510			
150.000						-.0530			
160.000						-.0470			
170.000						-.0550			
180.000	-.0772	-.0772	-.0752	-.0631	-.0530	.0900			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(RQ4006)

OA64 ORBITER ENTRY CONFIGURATION

MACH (3) = 4.000 ALPHA (4) = 14.050 RN/L = 3.4980 BETA = -4.0050

SECTION (1)FUSELAGE

DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2214	.1550	.1600												
70.000	.1848	.1789	.1530												
80.000	.1491	.1590	.1461												
90.000			.1322	.0934	.0388	.0150	.0100	.0090	.0070	.0061	.0051	.0051	.0044	.0044	.0044
100.000						.0110	.0080	.0061	.0051	.0031	.0021	.0011	.0012	.0001	.0001
110.000						.0110	.0080	.0041	.0011	-.0029	-.0049	-.0053	-.0074	-.0074	-.0085
120.000						.0110								-.0731	
130.000						-.0079								-.0699	
140.000						-.0555								-.0710	
150.000						-.0655								-.0688	
160.000						-.0674								-.0688	
170.000						-.0664								-.0677	
180.000						-.0655	-.0655	-.0655	-.0655	-.0655	-.0655	-.0645	-.0645	-.0656	-.0656

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0055	.0055	.0055	.0044	.0044	.0044	.0047	.0037	.0027	.0018	.0008	.0008	.0027	.0047	.0037
100.000	.0012	.0012	.0023	.0023	.0023	.0023	.0018	.0008	.0009	.0018	.0008	-.0032	-.0012	-.0022	-.0023
110.000	-.0085	-.0085	-.0074	-.0063	.0184	-.0074	-.0062	-.0062	-.0071	-.0081	-.0101	-.0091	-.0101	-.0101	-.0135
120.000						-.0785								-.0744	
130.000						-.0764								-.0735	
140.000						-.0774								-.0735	
150.000						-.0784								-.0784	
160.000						-.0735								-.0774	
170.000						-.0725								-.0784	
180.000	-.0858	-.0867	-.0877	-.0888	-.0888	-.0715	-.0725	-.0744	-.0764	-.0774	-.0784	-.0794	-.0804	-.0824	-.0802

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0670		
70.000							-.0529	-.0499	-.0499
80.000							-.0195	-.0185	-.0236
90.000	.0037	-.0054	-.0104	-.0155	-.0165	-.0074	-.0003	.0037	.0148
100.000	.0007	-.0023	-.0044	-.0064	-.0094	-.0013			
110.000	-.0104	-.0145	-.0135	-.0104	.0007	.1981			
120.000						.2165			
130.000						.0996			
140.000						-.0620			
150.000						-.0590			
160.000						-.0579			
170.000						-.0670			
180.000	-.0802	-.0792	-.0711	-.0620	-.0600	.0593			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

OA64 ORBITER ENTRY CONFIGURATION (RQ4D06)

MACH (3) = 4.000 ALPHA (3) = 16.000 RN/L = 3.4980 BETA = -4.0050

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2175	.1364	.1630												
70.000	.1709	.1738	.1512												
80.000	.1314	.1472	.1413												
90.000			.1216	.0920	.0378	.0162	.0112	.0102	.0093	.0083	.0073	.0083	.0075	.0065	.0065
100.000						.0102	.0073	.0063	.0053	.0033	.0033	.0033	.0022	.0012	.0022
110.000						.0033	.0033	.0024	-.0006	-.0036	-.0045	-.0063	-.0074	-.0074	-.0074
120.000						.0014								-.0808	
130.000						-.0174								-.0765	
140.000						-.0587								-.0733	
150.000						-.0686								-.0712	
160.000						-.0686								-.0712	
170.000						-.0676								-.0712	
180.000						-.0666	-.0666	-.0666	-.0656	-.0656	-.0666	-.0669	-.0669	-.0680	-.0691

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0065	.0065	.0065	.0054	.0065	.0065	.0043	.0033	.0023	.0013	.0023	.0023	.0033	.0053	.0043
100.000	.0022	.0022	.0033	.0033	.0033	.0033	.0013	.0013	-.0006	.0013	.0023	-.0016	-.0006	.0003	.0003
110.000	-.0063	-.0052	-.0042	-.0042	.0224	-.0042	-.0056	-.0066	-.0076	-.0086	-.0096	-.0096	-.0086	-.0096	-.0098
120.000						-.0786								-.0813	
130.000						-.0803								-.0793	
140.000						-.0823								-.0803	
150.000						-.0833								-.0793	
160.000						-.0843								-.0803	
170.000						-.0783								-.0803	
180.000	-.0701	-.0712	-.0723	-.0733	-.0733	-.0783	-.0773	-.0803	-.0833	-.0843	-.0853	-.0853	-.0833	-.0823	-.0782

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0712		
70.000							-.0661	-.0671	-.0611
80.000							-.0420	-.0430	-.0379
90.000	.0055	-.0057	-.0108	-.0158	-.0208	-.0138	-.0108	-.0057	.0114
100.000	.0055	-.0007	-.0027	-.0057	-.0067	-.0067			
110.000	-.0067	-.0108	-.0088	-.0077	.0053	.2153			
120.000						.2125			
130.000						.0939			
140.000						-.0692			
150.000						-.0611			
160.000						-.0611			
170.000						-.0702			
180.000	-.0702	-.0732	-.0671	-.0561	-.0480	.0657			

OA64 ORBITER ENTRY CONFIGURATION (RQ4006)

MACH (3) = 4.000 ALPHA (6) = 17.980 RN/L = 3.4980 BETA = -4.0050

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2138	.1184	.1658												
70.000	.1579	.1708	.1520												
80.000	.1134	.1352	.1391												
90.000			.1115	.0887	.0373	.0155	.0126	.0116	.0106	.0096	.0096	.0096	.0090	.0090	.0079
100.000						.0096	.0066	.0056	.0056	.0047	.0037	.0047	.0036	.0026	.0036
110.000						-.0072	-.0033	-.0023	-.0023	-.0052	-.0062	-.0070	-.0070	-.0060	-.0049
120.000						-.0112								-.0861	
130.000						-.0290								-.0829	
140.000						-.0625								-.0797	
150.000						-.0725								-.0754	
160.000						-.0715								-.0743	
170.000						-.0705								-.0754	
180.000						-.0695	-.0685	-.0685	-.0685	-.0695	-.0705	-.0711	-.0722	-.0733	-.0743

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0079	.0068	.0068	.0068	.0068	.0068	.0093	.0093	.0083	.0083	.0083	.0073	.0093	.0093	.0037
100.000	.0036	.0036	.0047	.0047	.0036	.0036	.0063	.0053	.0043	.0083	.0083	.0033	.0063	.0053	.0037
110.000	-.0049	-.0049	-.0038	-.0028	.0229	-.0038	-.0026	-.0036	-.0026	-.0026	-.0036	-.0045	-.0036	-.0036	-.0075
120.000						-.0818								-.0765	
130.000						-.0775								-.0755	
140.000						-.0775								-.0745	
150.000						-.0804								-.0735	
160.000						-.0824								-.0755	
170.000						-.0804								-.0755	
180.000	-.0754	-.0765	-.0765	-.0775	-.0722	-.0775	-.0775	-.0775	-.0794	-.0814	-.0804	-.0804	-.0794	-.0755	-.0731

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0731		
70.000							-.0741	-.0691	-.0650
80.000							-.0580	-.0620	-.0458
90.000	-.0024	-.0155	-.0236	-.0297	-.0357	-.0347	-.0327	-.0277	-.0186
100.000	.0087	-.0004	-.0044	-.0095	-.0125	-.0246			
110.000	-.0034	-.0064	-.0064	-.0075	.0006	.2154			
120.000						.2181			
130.000						.0916			
140.000						-.0721			
150.000						-.0640			
160.000						-.0671			
170.000						-.0721			
180.000	-.0721	-.0721	-.0830	-.0939	-.0499	.0188			

OA64 ORBITER ENTRY CONFIGURATION (R94008)

MACH (3) = 4.000 ALPHA (7) = 20.010 RN/L = 3.4980 BETA = -4.0[illegible]

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2118	.0959	.1702												
70.000	.1448	.1692	.1539												
80.000	.0[illegible]39	.1234	.1366												
90.000			.1000	.0847	.0359	.0145	.0104	.0094	.0074	.0064	.0074	.0074	.0087	.0087	.0076
100.000						.0054	.0033	.0013	.0013	.0013	.0003	.0013	.0033	.0022	.0033
110.000						-.0201	-.0109	-.0099	-.0089	-.0099	-.0099	-.0076	-.0076	-.0076	-.0065
120.000						-.0262								-.0926	
130.000						-.0425								-.0904	
140.000						-.0710								-.0893	
150.000						-.0811								-.0860	
160.000						-.0811								-.0838	
170.000						-.0791								-.0838	
180.000						-.0771	-.0761	-.0781	-.0791	-.0791	-.0822	-.0795	-.0806	-.0817	-.0838

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0065	.0065	.0076	.0065	.0076	.0087	.0094	.0094	.0084	.0074	.0063	.0043	.0023	-.0017	-.0109
100.000	.0033	.0033	.0022	.0033	.0033	.0033	.0053	.0043	.0043	.0074	.0043	.0053	.0084	.0063	.0054
110.000	-.0065	-.0054	-.0043	-.0033	.0142	-.0054	-.0047	-.0047	-.0047	-.0047	-.0047	-.0027	-.0027	-.0017	-.0028
120.000						-.0904								-.0853	
130.000						-.0863								-.0853	
140.000						-.0863								-.0853	
150.000						-.0883								-.0853	
160.000						-.0883								-.0812	
170.000						-.0903								-.0802	
180.000	-.0838	-.0849	-.0838	-.0838	-.0828	-.0832	-.0863	-.0873	-.0873	-.0883	-.0822	-.0832	-.0802	-.0792	-.0781

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0771		
70.000							-.0791	-.0740	-.0689
80.000							-.0720	-.0740	-.0638
90.000	-.0201	-.0313	-.0394	-.0486	-.0547	-.0537	-.0486	-.0476	-.0394
100.000	.0043	-.0069	-.0130	-.0191	-.0272	-.0486			
110.000	.0054	-.0038	-.0079	-.0099	-.0099	.1692			
120.000						.2227			
130.000						.0949			
[illegible]0.000						-.0750			
150.000						-.0679			
160.000						-.0700			
170.000						-.0771			
180.000	-.0781	-.0740	-.0679	-.0628	-.0547	.0125			

OA64 ORBITER ENTRY CONFIGURATION (R04006)

MACH (3) = 4.000 ALPHA (8) = 20.990 RN/L = 3.4980 BETA = -4.0050

SECTION (1 FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2073	.0890	.1687												
70.000	.1378	.1657	.1537												
80.000	.0880	.1179	.1358												
90.000			.0950	.0820	.0362	.0153	.0123	.0123	.0153	.0153	.0133	.0133	.0142	.0131	.0120
100.000						.0063	.0053	.0053	.0093	.0083	.0063	.0083	.0087	.0065	.0076
110.000						-.0206	-.0106	-.0066	-.0016	-.0026	-.0036	-.0043	-.0022	-.0011	-.0011
120.000						-.0305								-.0904	
130.000						-.0435								-.0871	
140.000						-.0714								-.0871	
150.000						-.0813								-.0860	
160.000						-.0803								-.0817	
170.000						-.0773								-.0806	
180.000						-.0763	-.0753	-.0743	-.0734	-.0743	-.0773	-.0773	-.0906	-.0806	-.0817

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0120	.0120	.0120	.0120	.0142	.0142	.0107	.0107	.0087	.0067	.0037	.0027	-.0014	-.0064	-.0165
100.000	.0087	.0076	.0065	.0065	.0087	.0087	.0057	.0067	.0067	.0067	.0067	.0067	.0087	.0057	.0047
110.000	-.0011	.0000	.0011	.0000	.0153	-.0011	-.0034	-.0034	-.0024	-.0024	-.0024	-.0014	.0006	.0006	.0027
120.000						-.0871								-.0842	
130.000						-.0883								-.0822	
140.000						-.0883								-.0832	
150.000						-.0903								-.0832	
160.000						-.0903								-.0822	
170.000						-.0923								-.0822	
180.000	-.0817	-.0828	-.0817	-.0806	-.0806	-.0883	-.0893	-.0903	-.0903	-.0893	-.0873	-.0842	-.0822	-.0822	-.0772

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0751		
70.000							-.0782	-.0721	-.0671
80.000							-.0721	-.0762	-.0610
90.000	-.0268	-.0388	-.0479	-.0559	-.0610	-.0580	-.0549	-.0489	-.0479
100.000	.0037	-.0105	-.0155	-.0256	-.0337	-.0509			
110.000	.0057	-.0024	-.0085	-.0115	-.0115	.1441			
120.000						.2180			
130.000						.0986			
140.000						-.0721			
150.000						-.0671			
160.000						-.0671			
170.000						-.0741			
180.000	-.0751	-.0711	-.0650	-.0620	-.0570	.0087			

OA64 ORBITER ENTRY CONFIGURATION (R04008)

MACH (4) = 4.500 ALPHA (1) = 8.000 RN/L = 3.4990 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2329	.1891	.1493												
70.000	.2224	.1881	.1493												
80.000	.2048	.1844	.1493												
90.000			.1505	.1084	.0464	.0242	.0195	.0172	.0154	.0131	.0119	.0101	.0072	.0060	.0042
100.000						.0242	.0207	.0177	.0148	.0119	.0096	.0084	.0048	.0042	.0018
110.000						.0324	.0242	.0183	.0125	.0066	.0043	.0018	-.0007	-.0019	-.0043
120.000						.0405								-.0362	
130.000						.0201								-.0428	
140.000						-.0267								-.0470	
150.000						-.0355								-.0458	
160.000						-.0384								-.0452	
170.000						-.0396								-.0446	
180.000						-.0401	-.0401	-.0413	-.0413	-.0419	-.0419	-.0428	-.0434	-.0434	-.0428

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0024	.0018	.0018	.0012	.0018	.0018	.0039	.0039	.0030	.0021	.0021	.0021	.0012	.0003	-.0078
100.000	.0005	-.0007	-.0013	-.0025	-.0031	-.0037	-.0024	-.0015	-.0015	-.0015	-.0015	-.0015	-.0024	-.0024	-.0084
110.000	-.0061	-.0067	-.0079	-.0091	.0072	-.0115	-.0105	-.0114	-.0105	-.0105	-.0096	-.0096	-.0087	-.0105	-.0143
120.000						.0120								-.0437	
130.000						-.0481								-.0419	
140.000						-.0463								-.0428	
150.000						-.0445								-.0419	
160.000						-.0428								-.0428	
170.000						-.0428								-.0428	
180.000	-.0428	-.0428	-.0428	-.0422	-.0422	-.0419	-.0419	-.0419	-.0410	-.0410	-.0410	-.0410	-.0428	-.0428	-.0424

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0293		
70.000							-.0091	-.0051	-.0006
80.000							.0034	.0066	.0132
90.000	.0001	-.0038	-.0071	-.0071	-.0058	.0014	.0151	.0249	.0256
100.000	-.0038	-.0064	-.0071	-.0071	.0001	.0191			
110.000	-.0110	-.0150	-.0156	-.0104	.0112	.0982			
120.000						.1983			
130.000						.1531			
140.000						-.0091			
150.000						-.0293			
160.000						-.0293			
170.000						-.0444			
180.000	-.0424	-.0424	-.0431	-.0405	-.0378	.0014			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

OA64 ORBITER ENTRY CONFIGURATION (RQ4006)

MACH (4) = 4.500 ALPHA (2) = 10.010 RN/L = 3.4990 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2261	.1863	.1487												
70.000	.2068	.1788	.1487												
80.000	.1822	.1716	.1435												
90.000			.1435	.1018	.0426	.0221	.0156	.0139	.0121	.0104	.0086	.0074	.0045	.0033	.0021
100.000						.0221	.0168	.0139	.0119	.0086	.0068	.0051	.0021	.0015	-.0009
110.000						.0250	.0192	.0139	.0092	.0045	.0010	-.0009	-.0046	-.0052	-.0076
120.000						.0250								-.0445	
130.000						.0074								-.0475	
140.000						-.0336								-.0524	
150.000						-.0424								-.0506	
160.000						-.0453								-.0494	
170.000						-.0453								-.0488	
180.000						-.0459	-.0459	-.0465	-.0465	-.0471	-.0471	-.0469	-.0475	-.0481	-.0475

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0015	.0009	.0015	.0015	.0021	.0021	.0029	.0029	.0011	.0002	.0002	-.0007	-.0007	.0002	-.0098
100.000	-.0015	-.0021	-.0027	-.0027	-.0027	-.0021	.0002	-.0007	-.0016	-.0016	-.0016	-.0034	-.0007	-.0051	-.0118
110.000	-.0088	-.0106	-.0106	-.0106	-.0083	-.0112	-.0105	-.0096	-.0096	-.0087	-.0096	-.0087	-.0096	-.0114	-.0197
120.000						-.0003								-.0517	
130.000						-.0553								-.0508	
140.000						-.0473								-.0508	
150.000						-.0508								-.0517	
160.000						-.0508								-.0517	
170.000						-.0499								-.0526	
180.000	-.0475	-.0469	-.0475	-.0475	-.0488	-.0490	-.0499	-.0499	-.0490	-.0508	-.0508	-.0526	-.0535	-.0544	-.0560

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0415		
70.000							-.0177	-.0111	-.0131
80.000							-.0012	.0021	.0040
90.000	-.0008	-.0059	-.0078	-.0092	-.0105	-.0059	.0113	.0199	.0252
100.000	-.0052	-.0078	-.0072	-.0078	-.0065	.0126			
110.000	-.0144	-.0177	-.0171	-.0138	.0047	.1321			
120.000						.1968			
130.000						.1143			
140.000						-.0302			
150.000						-.0408			
160.000						-.0382			
170.000						-.0441			
180.000	-.0540	-.0521	-.0494	-.0448	-.0435	-.0105			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1065) (RQ4006)

OA84 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (3) = 12.010 RN/L = 3.4990 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2188	.1841	.1493												
70.000	.1906	.1735	.1481												
80.000	.1611	.1599	.1387												
90.000			.1322	.0951	.0397	.0190	.0137	.0114	.0096	.0078	.0067	.0061	.0034	.0022	.0010
100.000						.0167	.0126	.0108	.0084	.0061	.0043	.0037	.0004	-.0008	-.0020
110.000						.0190	.0143	.0096	.0055	.0008	-.0022	-.0044	-.0069	-.0075	-.0093
120.000						.0190								-.0548	
130.000						.0031								-.0542	
140.000						-.0393								-.0566	
150.000						-.0481								-.0554	
160.000						-.0493								-.0542	
170.000						-.0499								-.0536	
180.000						-.0493	-.0505	-.0505	-.0505	-.0511	-.0505	-.0511	-.0511	-.0517	-.0517

X/L	.4500	.4680	.4960	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0010	.0016	.0016	.0022	.0016	.0016	.0023	.0014	.0014	-.0014	-.0014	-.0023	-.0014	.0005	-.0066
100.000	-.0026	-.0026	-.0026	-.0020	-.0008	-.0014	-.0004	-.0004	-.0014	-.0014	-.0032	-.0041	-.0041	-.0041	-.0086
110.000	-.0099	-.0099	-.0105	-.0099	-.0002	-.0093	-.0068	-.0068	-.0077	-.0077	-.0086	-.0095	-.0105	-.0123	-.0172
120.000						-.0063								-.0596	
130.000						-.0605								-.0578	
140.000						-.0542								-.0596	
150.000						-.0596								-.0605	
160.000						-.0578								-.0605	
170.000						-.0569								-.0605	
180.000	-.0517	-.0524	-.0536	-.0542	-.0554	-.0569	-.0578	-.0578	-.0587	-.0596	-.0605	-.0605	-.0624	-.0624	-.0613

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.0462		
80.000							-.0310	-.0310	-.0277
70.000							-.0027	-.0014	-.0047
80.000							.0105	.0092	.0157
90.000	.0028	-.0034	-.0060	-.0086	-.0099	.0026			
100.000	-.0020	-.0034	-.0034	-.0040	-.0040	.0157			
110.000	-.0099	-.0139	-.0132	-.0093	.0078	.1495			
120.000						.2055			
130.000						.1027			
140.000						-.0416			
150.000						-.0481			
160.000						-.0422			
170.000						-.0514			
180.000	-.0593	-.0580	-.0567	-.0495	-.0475	.0263			

OA64 ORBITER ENTRY CONFIGURATION (RQ4006)

MACH (4) = 4.500 ALPHA (4) = 14.000 RN/L = 3.4990 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2128	.1833	.1517												
70.000	.1751	.1675	.1429												
80.000	.1399	.1481	.1347												
90.000			.1218	.0907	.0391	.0186	.0139	.0121	.0104	.0086	.0074	.0063	.0048	.0042	.0036
100.000						.0151	.0110	.0098	.0074	.0057	.0045	.0039	.0012	.0006	.0000
110.000						.0133	.0104	.0068	.0039	-.0002	-.0019	-.0042	-.0054	-.0060	-.0072
120.000						.0104								-.0603	
130.000						-.0066								-.0585	
140.000						-.0424								-.0585	
150.000						-.0518								-.0561	
160.000						-.0524								-.0561	
170.000						-.0524								-.0549	
180.000						-.0512	-.0518	-.0518	-.0518	-.0518	-.0518	-.0525	-.0525	-.0537	-.0537

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0042	.0042	.0048	.0036	.0036	.0036	.0040	.0040	.0031	.0013	.0004	.0013	.0031	.0040	-.0024
100.000	.0000	.0006	.0012	.0018	.0018	.0012	.0022	.0013	.0004	.0004	-.0014	-.0014	-.0014	-.0014	-.0051
110.000	-.0078	-.0078	-.0066	-.0054	.0018	-.0054	-.0050	-.0041	-.0059	-.0068	-.0068	-.0059	-.0059	-.0086	-.0142
120.000						.0012								-.0598	
130.000						-.0616								-.0589	
140.000						-.0499								-.0589	
150.000						-.0625								-.0616	
160.000						-.0625								-.0598	
170.000						-.0598								-.0607	
180.000	-.0543	-.0555	-.0561	-.0573	-.0585	-.0589	-.0589	-.0598	-.0607	-.0625	-.0634	-.0634	-.0625	-.0607	-.0607

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0509		
70.000							-.0444	-.0430	-.0398
80.000							-.0182	-.0182	-.0227
90.000	.0048	-.0018	-.0044	-.0070	-.0090	.0021	.0054	.0074	.0185
100.000	.0021	-.0005	.0002	-.0018	-.0005	.0185			
110.000	-.0084	-.0098	-.0083	-.0057	.0172	.1606			
120.000						.2071			
130.000						.0945			
140.000						-.0476			
150.000						-.0509			
160.000						-.0470			
170.000						-.0607			
180.000	-.0801	-.0594	-.0561	-.0522	-.0502	-.0044			

OA64 ORBITER ENTRY CONFIGURATION (R04006)

MACH (4) = 4.950 ALPHA (5) = 16.010 RN/L = 3.4990 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2085	.1831	.1522												
70.000	.1611	.1635	.1416												
80.000	.1226	.1362	.1309												
90.000			.1114	.0841	.0361	.0154	.0112	.0100	.0077	.0065	.0059	.0053	.0043	.0043	.0037
100.000						.0100	.0071	.0059	.0047	.0029	0017	.0011	-.0006	-.0006	-.0006
110.000						.0023	.0017	.0000	-.0018	-.0042	-.0060	-.0066	-.0079	-.0035	-.0085
120.000						-.0018								-.0687	
130.000						-.0154								-.0663	
140.000						-.0439								-.0639	
150.000						-.0581								-.0620	
160.000						-.0581								-.0614	
170.000						-.0581								-.0614	
180.000						-.0575	-.0575	-.0575	-.0569	-.0569	-.0581	-.0578	-.0590	-.0606	-.0608

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0043	.0037	.0037	.0025	.0025	.0025	.0030	.0030	.0021	.0021	.0021	.0030	.0039	.0057	-.0035
100.000	.0001	.0007	.0007	.0007	.0007	-.0006	.0012	.0012	-.0006	-.0006	-.0015	-.0015	.0003	-.0006	-.0048
110.000	-.0085	-.0073	-.0066	-.0066	.0007	-.0066	-.0052	-.0070	-.0070	-.0079	-.0079	-.0079	-.0079	-.0088	-.0141
120.000						-.0006								-.0660	
130.000						-.0660								-.0651	
140.000						-.0578								-.0651	
150.000						-.0669								-.0633	
160.000						-.0687								-.0669	
170.000						-.0660								-.0660	
180.000	-.0814	-.0626	-.0632	-.0632	-.0632	-.0651	-.0651	-.0669	-.0687	-.0696	-.0696	-.0687	-.0687	-.0669	-.0639

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0535		
70.000							-.0553	-.0553	-.0506
80.000							-.0387	-.0413	-.0420
90.000	.0025	-.0068	-.0115	-.0141	-.0188	-.0108	-.0088	-.0095	.0085
100.000	.0025	-.0015	-.0022	-.0042	-.0055	.0144			
110.000	-.0068	-.0101	-.0081	-.0068	.0131	.1778			
120.000						.2130			
130.000						.0915			
140.000						-.0559			
150.000						-.0553			
160.000						-.0559			
170.000						-.0626			
180.000	-.0619	-.0632	-.0619	-.0553	-.0453	.0244			

OA64 ORBITER ENTRY CONFIGURATION (RQ4006)

MACH (4) = 4.500 ALPHA (6) = 17.9[illegible] RN/L = 3.4990 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2033	.1838	.1560												
70.000	.1483	.1601	.1424												
80.000	.1051	.1252	.1294												
90.000			.1028	.0815	.0371	.0164	.0129	.0117	.0105	.0087	.0081	.0087	.0084	.0072	.0072
100.000						.0099	.0075	.0063	.0058	.0040	.0034	.0040	.0035	.0029	.0029
110.000						-.0061	-.0019	-.0013	-.0019	-.0037	-.0049	-.0057	-.0063	-.0057	-.0051
120.000						-.0108								-.0705	
130.000						-.0268								-.0687	
140.000						-.0469								-.0669	
150.000						-.0611								-.0644	
160.000						-.0605								-.0638	
170.000						-.0593								-.0638	
180.000						-.0581	-.0581	-.0575	-.0575	-.0587	-.0599	-.0608	-.0620	-.0626	-.0638

X/L	.4500	.4680	.4860	.5030	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0078	.0066	.0066	.0059	.0059	.0066	.0073	.0073	.0055	.0073	.0064	.0073	.0082	.0073	-.0096
100.000	.0035	.0035	.0041	.0035	.0029	.0023	.0028	.0037	.0028	.0037	.0037	.0037	.0046	.0055	-.0023
110.000	-.0045	-.0038	-.0026	-.0026	.0029	-.0038	-.0044	-.0044	-.0035	-.0044	-.0044	-.0044	-.0035	-.0044	-.0110
120.000						-.0032								-.0678	
130.000						-.0669								-.0651	
140.000						-.0633								-.0651	
150.000						-.0687								-.0633	
160.000						-.0696								-.0651	
170.000						-.0705								-.0651	
180.000	-.0638	-.0644	-.0644	-.0644	-.0650	-.0678	-.0678	-.0687	-.0705	-.0687	-.0687	-.0687	-.0660	-.0642	-.0672

X/L	.7290	.7470	.7670	.7850	.8030	.8293	.8620	.9000	.9400
PHI									
60.000							-.0598		
70.000							-.0645	-.0605	-.0558
80.000							-.0552	-.0578	-.0538
90.000	-.0056	-.0183	-.0224	-.0284	-.0337	-.0291	-.0291	-.0344	-.0210
100.000	.0044	-.0023	-.0036	-.0083	-.0110	.0024			
110.000	-.0038	-.0076	-.0083	-.0056	.0091	.1985			
120.000						.2132			
130.000						.0901			
140.000						-.0605			
150.000						-.0605			
160.000						-.0605			
170.000						-.0665			
180.000	-.0659	-.0652	-.0618	-.0511	-.0478	-.0224			

OA64 ORBITER ENTRY CONFIGURATION (RQ4006)

MACH (4) = 4.500 ALPHA (7) = 20.010 RN/L = 3.4990 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2540	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2003	.1655	.1590												
70.000	.1366	.1590	.1448												
80.000	.0905	.1193	.1283												
90.000			.0941	.0799	.0374	.0185	.0150	.0144	.0138	.0126	.0126	.0126	.0119	.0107	.0107
100.000						.0103	.0085	.0079	.0079	.0067	.0062	.0073	.0064	.0058	.0064
110.000						-.0115	-.0039	-.0015	-.0009	-.0027	-.0027	-.0027	-.0033	-.0027	-.0021
120.000						-.0198								-.0699	
130.000						-.0328								-.0687	
140.000						-.0534								-.0687	
150.000						-.0623								-.0675	
160.000						-.0617								-.0651	
170.000						-.0605								-.0651	
180.000						-.0587	-.0587	-.0582	-.0593	-.0611	-.0623	-.0621	-.0633	-.0645	-.0657

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5990	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0101	.0094	.0107	.0101	.0113	.0113	.0134	.0134	.0116	.0107	.0089	.0089	.0062	.0017	-.0166
100.000	.0084	.0084	.0058	.0058	.0058	.0064	.0071	.0080	.0080	.0089	.0089	.0089	.0107	.0107	.0032
110.000	-.0021	-.0009	-.0005	.0004	.0058	-.0015	-.0002	-.0002	-.0002	-.0002	-.0002	.0007	.0026	.0017	-.0027
120.000						.0028								-.0669	
130.000						-.0660								-.0642	
140.000						-.0588								-.0651	
150.000						-.0678								-.0651	
160.000						-.0678								-.0642	
170.000						-.0687								-.0633	
180.000	-.0683	-.0657	-.0657	-.0651	-.0657	-.0678	-.0678	-.0687	-.0687	-.0678	-.0660	-.0651	-.0633	-.0633	-.0607

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0547		
70.000							-.0600	-.0554	-.0521
80.000							-.0567	-.0587	-.0508
90.000	-.0148	-.0264	-.0330	-.0396	-.0436	-.0416	-.0436	-.0383	-.0343
100.000	.0085	-.0014	-.0054	-.0120	-.0153	-.0067			
110.000	.0071	.0012	-.0001	-.0027	.0078	.1631			
120.000						.2230			
130.000						.0953			
140.000						-.0554			
150.000						-.0547			
160.000						-.0528			
170.000						-.0626			
180.000	-.0594	-.0587	-.0528	-.0508	-.0482	-.0212			

OA64 ORBITER ENTRY CONFIGURATION (RQ4006)

MACH (4) = 4.500 ALPHA (8) = 21.000 RN/L = 3.4990 BETA = -4.0200

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.1988	.1863	.1592												
70.000	.1321	.1574	.1444												
80.000	.0838	.1115	.1279												
90.000			.0914	.0791	.0384	.0202	.0166	.0154	.0154	.0149	.0147	.0143	.0126	.0120	.0120
100.000						.0107	.0090	.0090	.0090	.0084	.0084	.0090	.0072	.0072	.0072
110.000						-.0134	-.0040	-.0010	.0001	-.0010	-.0016	-.0019	-.0013	-.0007	-.0007
120.000						-.0246								-.0705	
130.000						-.0352								-.0693	
140.000						-.0552								-.0693	
150.000						-.0641								-.0687	
160.000						-.0635								-.0663	
170.000						-.0611								-.0663	
180.000						-.0594	-.0594	-.0594	-.0611	-.0623	-.0629	-.0633	-.0645	-.0657	-.0663

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0114	.0114	.0120	.0126	.0151	.0132	.0168	.0150	.0114	.0105	.0096	.0078	.0042	-.0012	-.0254
100.000	.0084	.0072	.0072	.0072	.0078	.0090	.0105	.0114	.0114	.0114	.0123	.0114	.0123	.0105	-.0022
110.000	.0005	-.0001	.0017	.0011	.0078	-.0001	.0015	.0033	.0024	.0033	.0033	.0033	.0069	.0069	-.0009
120.000						.0011								-.0660	
130.000						-.0660								-.0642	
140.000						-.0642								-.0633	
150.000						-.0678								-.0642	
160.000						-.0669								-.0633	
170.000						-.0687								-.0633	
180.000	-.0669	-.0663	-.0657	-.0657	-.0663	-.0678	-.0687	-.0687	-.0678	-.0660	-.0651	-.0642	-.0633	-.0624	-.0659

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0599		
70.000							-.0639	-.0599	-.0560
80.000							-.0632	-.0639	-.0579
90.000	-.0281	-.0380	-.0453	-.0500	-.0540	-.0506	-.0533	-.0540	-.0427
100.000	.0004	-.0088	-.0142	-.0208	-.0248	-.0195			
110.000	.0044	-.0035	-.0062	-.0088	.0031	.1358			
120.000						.2108			
130.000						.0986			
140.000						-.0586			
150.000						-.0373			
160.000						-.0613			
170.000						-.0666			
180.000	-.0839	-.0819	-.0586	-.0566	-.0553	-.0248			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RG4007) (03 JAN 74)

OA64 ORBITER ENTRY CONFIGURATION

REFERENCE DATA

PARAMETRIC DATA

SREF = .0000 SQ.IN. XMRP = .0000 IN. BETA = -6.000 ELEVON = -15.000
LREF = .0000 IN. YMRP = .0000 IN.
BREF = .0000 IN. ZMRP = .0000 IN.
SCALE = .0150 SCALE

MACH (1) = 2.500 ALPHA (1) = 8.000 RN/L = 2.4990 BETA = -5.9800

SECTION (1) FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
60.000	.2949	.2130	.1999												
70.000	.2744	.2510	.2072												
80.000	.2496	.2466	.2086												
90.000			.2189	.1545	.0551	.0227	.0212	.0257	.0317	.0332	.0352	.0347	.0332	.0317	.0283
100.000						.0302	.0317	.0317	.0302	.0287	.0317	.0287	.0283	.0232	.0164
110.000						.0478	.0420	.0376	.0317	.0152	.0077	.0062	-.0006	-.0040	-.0074
120.000						.0683								-.1078	
130.000						-.0119								-.1214	
140.000						-.1112								-.1265	
150.000						-.1247								-.1214	
160.000						-.1247								-.1197	
170.000						-.1202								-.1146	
180.000						-.1278	-.1247	-.1187	-.1157	-.1127	-.1112	-.1112	-.1061	-.1044	-.0959

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0288	.0232	.0283	.0283	.0283	.0232	.0209	.0162	.0116	.0116	.0147	.0209	.0240	.0209	.0117
100.000	.0147	.0130	.0096	.0079	.0096	.0096	.0085	.0054	.0038	.0007	.0007	.0038	.0100	.0085	.0086
110.000	-.0108	-.0159	-.0193	-.0193	.0062	-.0193	-.0194	-.0178	-.0194	-.0225	-.0240	-.0225	-.0194	-.0163	-.0176
120.000						-.1469								-.1511	
130.000						-.1325								-.1511	
140.000						-.1201								-.1511	
150.000						-.1077								-.1170	
160.000						-.0938								-.0860	
170.000						-.0860								-.0705	
180.000	-.0942	-.0908	-.0891	-.0874	-.0857	-.0829	-.0767	-.0767	-.0705	-.0705	-.0690	-.0659	-.0628	-.0628	-.0591

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0376		
70.000							-.0360	-.0222	-.0114
80.000							-.0129	.0071	-.0129
90.000	.0009	-.0237	-.0345	-.0391	-.0360	-.0437	.0332	.0332	-.0114
100.000	.0025	-.0191	-.0253	-.0391	-.0376	-.0638			
110.000	-.0129	-.0299	-.0391	-.0437	-.0376	.1603			
120.000						.2928			

OA84 ORBITER ENTRY CONFIGURATION (R@4007)

MACH (1) = 2.500 ALPHA (1) = 8.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
130.000						.1990			
140.000						-.0838			
150.000						-.0453			
160.000						.0707			
170.000						.0635			
180.000	-.0468	-.0484	-.0407	.0302	.0635	.1947			

MACH (1) = 2.500 ALPHA (2) = 10.000 RN/L = 2.4990 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0370	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2928	.2257	.2052												
70.000	.2807	.2476	.2052												
80.000	.2257	.2330	.2023												
90.000			.2038	.1469	.0549	.0203	.0187	.0235	.0284	.0300	.0300	.0300	.0298	.0298	.0298
100.000						.0251	.0268	.0284	.0251	.0284	.0268	.0251	.0226	.0208	.0155
110.000						.0462	.0389	.0300	.0251	.0138	.0090	.0083	-.0007	-.0043	-.0115
120.000						.0593								-.1299	
130.000						-.0201								-.1424	
140.000						-.1300								-.1496	
150.000						-.1445								-.1478	
160.000						-.1462								-.1389	
170.000						-.1413								-.1335	
180.000						-.1462	-.1429	-.1381	-.1348	-.1316	-.1300	-.1299	-.1245	-.1227	-.1137

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0318	.0298	.0298	.0298	.0280	.0226	.0187	.0138	.0138	.0106	.0154	.0203	.0268	.0235	.0071
100.000	.0137	.0137	.0119	.0137	.0137	.0101	.0057	.0041	-.0007	-.0023	-.0007	.0009	.0106	.0122	.0071
110.000	-.0151	-.0168	-.0168	-.0168	.0137	-.0168	-.0201	-.0217	-.0253	-.0282	-.0282	-.0266	-.0217	-.0201	-.0191
120.000						-.1801								-.1736	
130.000						-.1639								-.1833	
140.000						-.1542								-.1801	
150.000						-.1478								-.1736	
160.000						-.1332								-.1316	
170.000						-.1025								-.0799	
180.000	-.1086	-.1048	-.0994	-.0958	-.0940	-.0880	-.0831	-.0783	-.0751	-.0670	-.0621	-.0573	-.0540	-.0573	-.0535

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (RQ4007)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (2) = 10.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0568		
70.000							-.0469	-.0453	-.0355
80.000							-.0306	-.0077	-.0306
90.000	-.0044	-.0273	-.0420	-.0486	-.0486	-.0551	.0251	.0169	-.0289
100.000	.0005	-.0224	-.0322	-.0486	-.0486	-.0519			
110.000	-.0159	-.0388	-.0469	-.0486	-.0551	.1725			
120.000						.2587			
130.000						.1380			
140.000						-.0764			
150.000						-.0486			
160.000						.0417			
170.000						-.0600			
180.000	-.0420	-.0502	-.0600	-.0273	.0718	.4240			

MACH (1) = 2.500 ALPHA (3) = 12.000 RN/L = 2.4990 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2827	.2068	.2068												
70.000	.2433	.2404	.2024												
80.000	.2010	.2199	.1951												
90.000			.1878	.1353	.0492	.0177	.0146	.0193	.0224	.0255	.0255	.0270	.0300	.0300	.0282
100.000						.0177	.0193	.0208	.0224	.0224	.0224	.0224	.0214	.0214	.0197
110.000						.0360	.0286	.0224	.0192	.0115	.0069	.0026	-.0026	-.0043	-.0077
120.000						.0433								-.1378	
130.000						-.0287								-.1447	
140.000						-.1310								-.1567	
150.000						-.1480								-.1515	
160.000						-.1480								-.1430	
170.000						-.1434								-.1344	
180.000						-.1465	-.1434	-.1403	-.1372	-.1356	-.1325	-.1310	-.1276	-.1241	-.1156

X/L	.4500	.4680	.486[illegible]	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0300	.0300	.0300	.0282	.0282	.0214	.0190	.0143	.0143	.0096	.0143	.0190	.0285	.0269	.0110
100.000	.0197	.0197	.0145	.0145	.0128	.0111	.0064	.0033	.0017	-.0015	.0017	.0017	.0112	.0159	.0126
110.000	-.0111	-.0111	-.0111	-.0111	.0145	-.0163	-.0188	-.0204	-.0220	-.0251	-.0267	-.0251	-.0220	-.0204	-.0128
120.000						-.1772								-.1639	
130.000						-.1734								-.1639	
140.000						-.1655								-.1623	
150.000						-.1576								-.1749	

OA64 ORBITER ENTRY CONFIGURATION (RQ4007)

MACH (1) = 2.300 ALPHA (3) = 12.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4300	.4480	.4660	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
160.000						-.1608								-.1749	
170.000						-.1497								-.1592	
180.000	-.1104	-.1087	-.1019	-.0950	-.0882	-.0819	-.0756	-.0645	-.0630	-.0598	-.0582	-.0630	-.0677	-.0740	-.0762

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0794		
70.000							-.0651	-.0524	-.0524
80.000							-.0366	-.0207	-.0382
90.000	-.0048	-.0255	-.0413	-.0461	-.0524	-.0572	.0158	.0079	-.0382
100.000	.0031	-.0139	-.0286	-.0445	-.0445	-.0540			
110.000	-.0098	-.0350	-.0429	-.0524	-.0572	.1796			
120.000						.2341			
130.000						.1063			
140.000						-.1016			
150.000						-.0445			
160.000						-.0667			
170.000						-.1191			
180.000	-.0651	-.0683	-.0762	-.0810	.0360	.4035			

MACH (1) = 2.300 ALPHA (4) = 14.010 RN/L = 2.4990 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2754	.1695	.2063												
70.000	.2258	.2345	.2010												
80.000	.1782	.2039	.1893												
90.000			.1732	.1251	.0448	.0131	.0131	.0162	.0193	.0208	.0224	.0270	.0282	.0282	.0282
100.000						.0084	.0115	.0131	.0177	.0193	.0193	.0208	.0213	.0213	.0213
110.000						.0208	.0193	.0162	.0115	.0069	.0022	.0024	-.0028	-.0028	-.0045
120.000						.0301								-.1579	
130.000						-.0349								-.1579	
140.000						-.1372								-.1682	
150.000						-.1575								-.1614	
160.000						-.1573								-.1579	
170.000						-.1527								-.1493	
180.000						-.1527	-.1480	-.1449	-.1434	-.1403	-.1372	-.1407	-.1372	-.1355	-.1286

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(RQ4007)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (4) = 14.010

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.4300	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0251	.0265	.0282	.0265	.0282	.0231	.0238	.0191	.0175	.0143	.0175	.0238	.0269	.0317	.0112
100.000	.0251	.0179	.0162	.0179	.0144	.0144	.0112	.0096	.0080	.0049	.0033	.0064	.0127	.0175	.0112
110.000	-.0082	-.0080	-.0097	-.0114	.0144	-.0131	-.0125	-.0141	-.0204	-.0220	-.0220	-.0204	-.0188	-.0156	-.0125
120.000						-.1803								-.1560	
130.000						-.1781								-.1560	
140.000						-.1876								-.1623	
150.000						-.1671								-.1765	
160.000						-.1639								-.1828	
170.000						-.1797								-.1781	
180.000	-.1289	-.1217	-.1165	-.1062	-.0924	-.0866	-.0882	-.0914	-.0977	-.1040	-.1087	-.1197	-.1245	-.1276	-.1324

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1103		
70.000							-.0850	-.0805	-.0803
80.000							-.0472	-.0330	-.0503
90.000	-.0082	-.0330	-.0440	-.0519	-.0582	-.0598	-. 30	-.0030	-.0409
100.000	.0001	-.0188	-.0314	-.0425	-.0472	-.0598			
110.000	-.0109	-.0348	-.0440	-.0472	-.0551	.1855			
120.000						.2172			
130.000						.0863			
140.000						-.1260			
150.000						-.0787			
160.000						-.0630			
170.000						-.1182			
180.000	-.1229	-.1308	-.1260	-.1245	-.0708	.2589			

MACH (1) = 2.500 ALPHA (5) = 16.000 RN/L = 2.4990 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2718	.1590	.2131												
70.000	.2087	.2292	.1985												
80.000	.1578	.1912	.1854												
90.000			.1576	.1181	.0406	.0096	.0080	.0128	.0159	.0191	.0191	.0223	.0265	.0265	.0230
100.000						.0016	.0048	.0080	.0128	.0128	.0143	.0159	.0212	.0230	.0212
110.000						.0016	.0048	.0064	.0032	.0016	-.0015	-.0018	-.0036	-.0036	-.0036
120.000						.0096								-.1843	
130.000						-.0460								-.1737	
140.000						-.1508								-.1897	
150.000						-.1682								-.1737	

OA64 ORBITER ENTRY CONFIGURATION (R0=007)

MACH (1) = 2.500 ALPHA (5) = 16.000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
160.000						-.1698								-.1683	
170.000						-.1635								-.1683	
180.000						-.1619	-.1587	-.1555	-.1324	-.1508	-.1524	-.1542	-.1542	-.1542	-.1489

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0230	.0230	.0283	.0230	.0230	.0230	.0206	.0174	.0158	.0174	.0158	.0222	.0270	.0286	.0058
100.000	.0194	.0194	.0212	.0176	.0141	.0141	.0119	.0078	.0063	.0063	.0063	.0078	.0142	.0158	.0107
110.000	-.0054	-.0072	-.0072	-.0072	.0159	-.0125	-.0161	-.0145	-.0177	-.0193	-.0193	-.0209	-.0161	-.0161	-.0121
120.000						-.1843								-.1599	
130.000						-.1838								-.1599	
140.000						-.1950								-.1615	
150.000						-.1982								-.1854	
160.000						-.1663								-.1854	
170.000						-.1759								-.1902	
180.000	-.1506	-.1542	-.1489	-.1382	-.1453	-.1503	-.1583	-.1711	-.1711	-.1743	-.1695	-.1727	-.1695	-.1663	-.1684

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1488		
70.000							-.1147	-.1260	-.1228
80.000							-.0707	-.0723	-.0691
90.000	-.0105	-.0382	-.0512	-.0577	-.0691	-.0479	-.0382	-.0251	-.0447
100.000	-.0024	-.0219	-.0349	-.0463	-.0528	-.0479			
110.000	-.0121	-.0349	-.0463	-.0544	-.0528	.1796			
120.000						.2097			
130.000						.0720			
140.000						-.1260			
150.000						-.0756			
160.000						-.0414			
170.000						-.1212			
180.000	-.1586	-.1505	-.1472	-.1391	-.0854	.2298			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063) (R04007)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.500 ALPHA (6) = 18.000 RN/L = 2.4990 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2704	.1437	.2195												
70.000	.1947	.2238	.2005												
80.000	.1379	.1758	.1860												
90.000			.1466	.1161	.0432	.0112	.0112	.0159	.0175	.0206	.0222	.0222	.0231	.0231	.0231
100.000						-.0013	.0018	.0049	.0081	.0096	.0112	.0159	.0197	.0214	.0197
110.000						-.0186	-.0092	-.0045	-.0029	-.0045	-.0060	-.0024	-.0024	-.0024	-.0024
120.000						-.0107								-.1946	
130.000						-.0515								-.1844	
140.000						-.1518								-.1793	
150.000						-.1722								-.1725	
160.000						-.1722								-.1674	
170.000						-.1659								-.1725	
180.000						-.1627	-.1596	-.1549	-.1549	-.1585	-.1580	-.1572	-.1606	-.1589	-.1589

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0231	.0231	.0231	.0231	.0231	.0231	.0222	.0206	.0159	.0159	.0175	.0191	.0222	.0191	-.0051
100.000	.0197	.0163	.0163	.0197	.0163	.0146	.0128	.0128	.0096	.0096	.0096	.0112	.0206	.0191	.0108
110.000	-.0041	-.0041	-.0058	-.0058	.0163	-.0109	-.0107	-.0139	-.0154	-.0186	-.0154	-.0139	-.0092	-.0092	-.0083
120.000						-.1793								-.1596	
130.000						-.1800								-.1580	
140.000						-.1894								-.1580	
150.000						-.1957								-.1847	
160.000						-.1925								-.1847	
170.000						-.1690								-.1816	
180.000	-.1640	-.1608	-.1589	-.1572	-.1640	-.1753	-.1784	-.1816	-.1800	-.1784	-.1769	-.1753	-.1753	-.1753	-.1727

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.1599		
70.000							-.1552	-.1631	-.1488
80.000							-.1137	-.0977	-.1089
90.000	-.0211	-.0450	-.0610	-.0738	-.0833	-.0690	-.0578	-.0434	-.0690
100.000	-.0055	-.0243	-.0354	-.0462	-.0594	-.0642			
110.000	-.0119	-.0354	-.0450	-.0466	-.0578	.1652			
120.000						.2083			
130.000						.0632			
140.000						-.1152			
150.000						-.0642			
160.000						-.0386			
170.000						-.0993			
180.000	-.1567	-.1520	-.1504	-.1280	-.0849	.2011			

OA64 ORBITER ENTRY CONFIGURATION (RQ4007)

MACH (1) = 2.500 ALPHA (7) = 20.010 RN/L = 2.4990 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI															
80.000	.2633	.1190	.2196												
70.000	.1773	.2196	.1977												
80.000	.1132	.1584	.1788												
90.000			.1263	.1039	.0403	.0096	.0111	.0158	.0158	.0205	.0237	.0252	.0245	.0245	.0245
100.000						-.0045	-.0030	.0033	.0064	.0096	.0143	.0158	.0176	.0158	.0158
110.000						-.0468	-.0265	-.0171	-.0108	-.0108	-.0061	-.0051	-.0034	-.0034	-.0016
120.000						-.0406								-.2129	
130.000						-.0672								-.2041	
140.000						-.1596								-.1954	
150.000						-.1816								-.1797	
160.000						-.1784								-.1783	
170.000						-.1737								-.1780	
180.000						-.1675	-.1628	-.1596	-.1596	-.1612	-.1659	-.1710	-.1692	-.1710	-.1762

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0245	.0245	.0280	.0280	.0263	.0245	.0220	.0220	.0204	.0188	.0204	.0188	.0157	.0093	-.0202
100.000	.0158	.0158	.0176	.0245	.0193	.0193	.0157	.0157	.0157	.0188	.0157	.0204	.0188	.0220	.0073
110.000	-.0034	-.0034	-.0051	-.0016	.0210	-.0051	-.0081	-.0113	-.0097	-.0113	-.0113	-.0081	-.0018	-.0034	-.0056
120.000						-.1902								-.1620	
130.000						-.1921								-.1604	
140.000						-.1921								-.1620	
150.000						-.1921								-.1858	
160.000						-.1937								-.1873	
170.000						-.1794								-.1873	
180.000	-.1762	-.1745	-.1675	-.1657	-.1675	-.1778	-.1842	-.1873	-.1873	-.1873	-.1826	-.1778	-.1778	-.1762	-.1704

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1720		
70.000							-.1833	-.1801	-.1446
80.000							-.1526	-.1349	-.1333
90.000	-.0412	-.0670	-.0832	-.0977	-.1139	-.1010	-.0929	-.0638	-.0977
100.000	-.0089	-.0299	-.0460	-.0573	-.0703	-.0929			
110.000	-.0089	-.0379	-.0444	-.0557	-.0606	.1451			
120.000						.2070			
130.000						.0617			
140.000						-.0945			
150.000						-.0589			
160.000						-.0283			
170.000						-.0670			
180.000	-.1591	-.1591	-.1559	-.1333	-.0945	.1912			

DATE 24 JAN 74

TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

(RQ4007)

OA64 ORBITER ENTRY CONFIGURATION

MACH (1) = 2.950 ALPHA (8) = 20.990 RN/L = 2.4990 BETA = -5.9800

SECTION (1)FUSELAGE

DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2800	.1070	.2192												
70.000	.1668	.2148	.1974												
80.000	.1012	.1507	.1755			.0111	.0126	.0157	.0204	.0220	.0235	.0251	.0279	.0245	.0245
90.000			.1187	.1041	.0400	-.0061	-.0014	.0033	.0095	.0111	.0126	.0157	.0193	.0159	.0159
100.000						-.0574	-.0309	-.0201	-.0123	-.010.	-.0092	-.0029	-.0029	-.0012	-.0029
110.000						-.0543								-.2115	
120.000						-.0745								-.2029	
130.000						-.1617								-.2012	
140.000						-.1034								-.1756	
150.000						-.1819								-.1739	
160.000						-.1741								-.1790	
170.000						-.1679	-.1652	-.1601	-.1601	-.1617	-.1648	-.1653	-.1687	-.1722	-.1722
180.000															

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0245	.0279	.0296	.0296	.0313	.0279	.0234	.0234	.0218	.0187	.0187	.0155	.0124	-.0002	-.0317
100.000	.0159	.0159	.0193	.0210	.0210	.0193	.0155	.0171	.0218	.0187	.0187	.0218	.0250	.0234	.0045
110.000	-.0012	-.0029	-.0012	-.0012	.0210	-.0029	-.0049	-.0081	-.0097	-.0081	-.0065	-.0034	-.0002	-.0002	-.0034
120.000						-.1927								-.1482	
130.000						-.1955								-.1482	
140.000						-.1955								-.1577	
150.000						-.1955								-.1939	
160.000						-.1971								-.1939	
170.000						-.1892								-.1955	
180.000	-.1722	-.1568	-.1499	-.1533	-.1636	-.1813	-.1829	-.1845	-.1829	-.1813	-.1797	-.1719	-.1734	-.1719	-.1640

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1703		
70.000							-.1813	-.1703	-.1278
80.000							-.1577	-.1419	-.1388
90.000	-.0538	-.0790	-.0963	-.1105	-.1230	-.1105	-.1073	-.0868	-.1057
100.000	-.0097	-.0364	-.0490	-.0648	-.0758	-.1073			
110.000	-.0097	-.0364	-.0490	-.0522	-.0601	.1246			
120.000						.2078			
130.000						.0700			
140.000						-.0758			
150.000						-.0648			
160.000						-.0191			
170.000						-.0364			
180.000	-.1377	-.1561	-.1530	-.1325	-.0918	.1906			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1963) (RQ4007)

OA64 ORBITER ENTRY CONFIGURATION

MACH (2) = 2.950 ALPHA (1) = 7.990 RN/L = 2.5135 BETA = -6.0000

DEPENDENT VARIABLE CP

SECTION (1)FUSELAGE

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2978	.2195	.2065												
70.000	.2815	.2521	.2081												
80.000	.2587	.2472	.2097												
90.000			.2195	.1591	.0673	.0360	.0290	.0290	.0343	.0343	.0343	.0343	.0296	.0296	.0258
100.000						.0395	.0343	.0360	.0308	.0308	.0325	.0308	.0258	.0277	.0220
110.000						.0551	.0430	.0395	.0325	.0221	.0203	.0125	.0106	.0087	.0050
120.000						.0760								-.0749	
130.000						.0134								-.0863	
140.000						-.0737								-.0958	
150.000						-.0876								-.0958	
160.000						-.0928								-.0939	
170.000						-.0928								-.0920	
180.000						-.0945	-.0963	-.0893	-.0893	-.0893	-.0876	-.0882	-.0882	-.0882	-.0863

X/L	.4500	.4630	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0258	.0239	.0258	.0258	.0277	.0277	.0243	.0208	.0173	.0155	.0173	.0100	.0243	.0261	.0258
100.000	.0182	.0163	.0163	.0125	.0125	.0144	.0155	.0208	.0102	.0085	.0067	.0067	.0085	.0102	.0151
110.000	-.0008	-.0027	-.0046	-.0065	.0144	-.0065	-.0074	-.0074	-.0074	-.0091	-.0109	-.0109	-.0127	-.0127	-.0075
120.000						-.1053								-.1025	
130.000						-.1025								-.1007	
140.000						-.1043								-.1007	
150.000						-.1007								-.1007	
160.000						-.0902								-.0937	
170.000						-.0831								-.0637	-.0580
180.000	-.0844	-.0806	-.0768	-.0749	-.0730	-.0778	-.0761	-.0778	-.0761	-.0725	-.0673	-.0673	-.0637		

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0249		
70.000							-.0127	-.0006	-.0006
80.000							-.0006	.0308	.0151
90.000	.0221	.0047	-.0093	-.0127	-.0197	-.0197	.0482	.0517	.0256
100.000	.0168	.0099	.0029	-.0093	-.0127	-.0354			
110.000	.0029	-.0075	-.0093	-.0110	-.0127	.1795			
120.000						.2792			
130.000						.2053			
140.000						-.0475			
150.000						-.0475			
160.000						-.0110			
170.000						-.0702			
180.000	-.0806	-.0582	-.0380	-.0562	-.0336	.2551			

OA64 ORBITER ENTRY CONFIGURATION (RQ4007)

MACH (2) = 2.950 ALPHA (2) = 10.010 RN/L = 2.5135 BETA = -6.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2879	.2275	.2047												
70.000	.2634	.2438	.2063												
80.000	.2308	.2324	.2047												
90.000			.2014	.1475	.0606	.0312	.0277	.0277	.0277	.0295	.0277	.0295	.0269	.0269	.0231
100.000						.0312	.0312	.0295	.0295	.0277	.0260	.0260	.0231	.0212	.0193
110.000						.0485	.0398	.0329	.0277	.0191	.0156	.0135	.0078	.0059	.0002
120.000						.0606								-.0839	
130.000						.0018								-.0954	
140.000						-.0829								-.1068	
150.000						-.0985								-.1049	
160.000						-.1002								-.1030	
170.000						-.1002								-.1011	
180.000						-.1019	-.1002	-.0985	-.0967	-.0967	-.0967	-.0954	-.0954	-.0973	-.0954
X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0269	.0269	.0288	.0269	.0288	.0269	.0237	.0219	.0185	.0150	.0185	.0202	.0254	.0272	.0231
100.000	.0174	.0174	.0174	.0174	.0193	.0193	.0183	.0219	.0185	.0098	.0080	.0063	.0132	.0132	.0161
110.000	-.0017	-.0037	-.0037	-.0017	.0212	-.0037	-.0024	-.0042	-.0059	-.0076	-.0111	-.0094	-.0111	-.0111	-.0049
120.000						-.1259								-.1102	
130.000						-.1155								-.1102	
140.000						-.1085								-.1120	
150.000						-.1068								-.1102	
160.000						-.1050								-.1102	
170.000						-.0981								-.1172	
180.000	-.0915	-.0898	-.0877	-.0839	-.0858	-.0859	-.0859	-.0842	-.0842	-.0859	-.0894	-.0981	-.1120	-.1120	-.1117
X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400						
PHI															
60.000							-.0364								
70.000							-.0224	-.0137	-.0137						
80.000							-.0067	.0196	.0073						
90.000	.0196	.0056	-.0084	-.0154	-.0207	-.0224	.0406	.0441	.0178						
100.000	.0196	.0075	.0021	-.0102	-.0137	-.0242									
110.000	.0021	-.0067	-.0119	-.0154	-.0189	.1840									
120.000						.2609									
130.000						.1615									
140.000						-.0732									
150.000						-.0644									
160.000						-.0224									
170.000						-.0889									
180.000	-.1062	-.1117	-.1099	-.1012	-.0784	.2128									

OA64 ORBITER ENTRY CONFIGURATION (R04007)

MACH (2) = 2.950 ALPHA (3) = 11.970 RN/L = 2.5135 BETA = -6.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2831	.2129	.2080												
70.000	.2472	.2374	.2031												
80.000	.2080	.2194	.1982												
90.000			.1901	.1411	.0586	.0290	.0238	.0255	.0255	.0273	.0273	.0273	.0251	.0251	.0251
100.000						.0273	.0255	.0255	.0238	.0220	.0220	.0220	.0194	.0194	.0194
110.000						.0360	.0325	.0255	.0220	.0133	.0099	.0079	.0041	.0041	.0003
120.000						.0429								-.1011	
130.000						-.0075								-.1049	
140.000						-.0893								-.1144	
150.000						-.1067								-.1125	
160.000						-.1085								-.1106	
170.000						-.1067								-.1068	
180.000						-.1085	-.1067	-.1050	-.1033	-.1033	-.1033	-.1030	-.1049	-.1049	-.1011

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0270	.0270	.0270	.0270	.0270	.0251	.0214	.0197	.0162	.0162	.0179	.0197	.0232	.0284	.0250
100.000	.0194	.0194	.0194	.0194	.0194	.0175	.0144	.0197	.0144	.0074	.0074	.0074	.0127	.0127	.0141
110.000	.0003	.0003	.0003	.0003	.0213	-.0036	-.0031	-.0048	-.0066	-.0083	-.0101	-.0118	-.0101	-.0101	-.0108
120.000						-.1336								-.1186	
130.000						-.1274								-.1186	
140.000						-.1221								-.1180	
150.000						-.1169								-.1344	
160.000						-.1169								-.1344	
170.000						-.1186								-.1291	
180.000	-.1011	-.1011	-.0972	-.0934	-.0934	-.1046	-.1081	-.1186	-.1256	-.1309	-.1326	-.1344	-.1326	-.1309	-.1338

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0643		
70.000							0358	-.0287	-.0287
80.000							-.0144	.0052	-.0073
90.000	.0159	-.0037	-.0144	-.0215	-.0287	-.0269	.0213	.0355	.0052
100.000	.0177	.0034	-.0037	-.0144	-.0215	-.0269			
110.000	-.0001	-.0108	-.0144	-.0144	-.0233	.2099			
120.000						.2468			
130.000						.1329			
140.000						-.1000			
150.000						-.0714			
160.000						-.0661			
170.000						-.0875			
180.000	-.1303	-.1303	-.1232	-.1035	-.0875	.1229			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1063)

OA84 ORBITER ENTRY CONFIGURATION (R04007)

MACH (2) = 2.950 ALPHA (4) = 13.980 RN/L = 2.5135 BETA = -6.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2747	.1849	.2127												
70.000	.2290	.2306	.2029												
80.000	.1833	.2045	.1947												
90.000			.1752	.1327	.0504	.0171	.0152	.0152	.0171	.0171	.0171	.0208	.0199	.0199	.0178
100.000						.0134	.0115	.0134	.0134	.0134	.0134	.0152	.0117	.0117	.0117
110.000						.0152	.0152	.0097	.0078	.0023	.0004	-.0026	-.0047	-.0047	-.0067
120.000						.0208								-.1335	
130.000						-.0217								-.1314	
140.000						-.1105								-.1396	
150.000						-.1290								-.1376	
160.000						-.1309								-.1335	
170.000						-.1272								-.1314	
180.000						-.1272	-.1253	-.1235	-.1216	-.1216	-.1253	-.1274	-.1274	-.1294	-.1274

X/L	.4500	.4680	.4850	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6980	.7100
PHI															
90.000	.0178	.0158	.0158	.0158	.0178	.0158	.0168	.0131	.0112	.0112	.0112	.0131	.0187	.0225	.0187
100.000	.0117	.0117	.0117	.0117	.0117	.0117	.0093	.0131	.0112	.0036	.0018	.0018	.0055	.0074	.0112
110.000	-.0067	-.0088	-.0067	-.0088	.0158	-.0108	-.0114	-.0114	-.0133	-.0171	-.0171	-.0171	-.0152	-.0171	-.0152
120.000						-.1519								-.1396	
130.000						-.1510								-.1396	
140.000						-.1547								-.1396	
150.000						-.1491								-.1547	
160.000						-.1378								-.1585	
170.000						-.1434								-.1535	
180.000	-.1294	-.1294	-.1253	-.1253	-.1274	-.1415	-.1472	-.1528	-.1547	-.1528	-.1528	-.1566	-.1547	-.1623	-.1585

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI							-.1019		
60.000							-.0642	-.0586	-.0F42
70.000							-.0265	-.0265	-.0227
80.000							-.0114	.0187	-.0058
90.000	.0074	-.0114	-.0285	-.0341	-.0397	-.0209			
100.000	.0112	-.0039	-.0133	-.0227	-.0303	-.0227			
110.000	-.0058	-.0152	-.0246	-.0284	-.0303	.2305			
120.000						.2450			
130.000						.1111			
140.000						-.1246			
150.000						-.0963			
160.000						-.0718			
170.000						-.1019			
180.000	-.1528	-.1491	-.1434	-.1227	-.1019	.0998			

OA64 ORBITER ENTRY CONFIGURATION (RQ4007)

MACH (2) = 2.950 ALPHA (5) = 16.000 R'/L = 2.5135 BETA = -6.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2698	.1689	.2110												
70.000	.2110	.2257	.1995												
80.000	.1620	.1914	.1865												
90.000			.1604	.1243	.0518	.0224	.0207	.0224	.0224	.0241	.0241	.0259	.0242	.0242	.0223
100.000						.0138	.0138	.0155	.0172	.0190	.0172	.0207	.0184	.0184	.0205
110.000						.0086	.0103	.0103	.0103	.0069	.0051	.0031	.0031	.0011	.0051
120.000						.0086								-.1353	
130.000						-.0225								-.1276	
140.000						-.1037								-.1296	
150.000						-.1192								-.1257	
160.000						-.1210								-.1238	
170.000						-.1175								-.1238	
180.000						-.1158	-.1141	-.1123	-.1123	-.1141	-.1158	-.1180	-.1219	-.1219	-.1238

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0223	.0223	.0223	.0223	.0261	.0242	.0223	.0205	.0188	.0205	.0188	.0205	.0240	.0293	.0252
100.000	.0184	.0165	.0184	.0184	.0184	.0184	.0170	.0205	.0188	.0135	.0117	.0117	.0153	.0188	.0217
110.000	.0031	.0011	.0011	.0031	.0223	.0011	-.0006	-.0006	-.0041	-.0059	-.0059	-.0059	-.0041	-.0059	-.0013
120.000						-.1353								-.1272	
130.000						-.1360								-.1272	
140.000						-.1430								-.1272	
150.000						-.1466								-.1430	
160.000						-.1343								-.1430	
170.000						-.1325								-.1430	
180.000	-.1238	-.1238	-.1238	-.1257	-.1315	-.1378	-.1378	-.1413	-.1413	-.1448	-.1483	-.1483	-.1448	-.1466	-.1394

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
90.000							-.1075		
70.000							-.0863	-.0828	-.0774
80.000							-.0367	-.0355	-.0261
90.000	.0128	-.0067	-.0190	-.0297	-.0350	-.0190	-.0084	.02	.0022
100.000	.0217	.0022	-.0031	-.0155	-.0226	-.0173			
110.000	.0075	-.0087	-.0137	-.0155	-.0226	.2207			
120.000						.2448			
130.000						.0995			
140.000						-.1111			
150.000						-.0774			
160.000						-.0580			
170.000						-.0881			
180.000	-.1341	-.1341	-.1255	-.1022	-.0863	.1373			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA64 (LARC UPWT 1083) PAGE 389

OA64 ORBITER ENTRY CONFIGURATION (R64007)

MACH (2) = 2.950 ALPHA (6) = 17.990 RN/L = 2.5135 BETA = -6.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2647	.1472	.2141												
70.000	.1961	.2173	.1994												
80.000	.1408	.1749	.1831												
90.000			.1472	.1190	.0534	.0241	.0223	.0223	.0241	.0258	.0258	.0275	.0254	.0254	.0254
100.000						.0120	.0137	.0137	.0154	.0154	.0154	.0189	.0196	.0176	.0198
110.000						-.0087	-.0001	.0033	.0051	.0033	-.0001	.0022	.0022	.0022	.0060
120.000						-.0087								-.1506	
130.000						-.0381								-.1429	
140.000						-.1089								-.1371	
150.000						-.1262								-.1332	
160.000						-.1262								-.1293	
170.000						-.1244								-.1293	
180.000						-.1210	-.1210	-.1175	-.1193	-.1210	-.1279	-.1293	-.1313	-.1313	-.1332

X/L	.4500	.4680	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0254	.0234	.0254	.0254	.0254	.0254	.0257	.0240	.0222	.0240	.0222	.0257	.0275	.0310	.0192
100.000	.0178	.0178	.0196	.0215	.0196	.0196	.0222	.0240	.0222	.0187	.0187	.0204	.0222	.0222	.0263
110.000	.0041	.0022	.0022	.0041	.0215	.0022	.0046	.0029	.0011	.0011	.0011	.0011	.0011	.0011	.0049
120.000						-.1390								-.1272	
130.000						-.1360								-.1272	
140.000						-.1360								-.1308	
150.000						-.1448								-.1308	
160.000						-.1501								-.1395	
170.000						-.1343								-.1395	
180.000	-.1313	-.1313	-.1313	-.1313	-.1332	-.1360	-.1395	-.1431	-.1483	-.1466	-.1483	-.1466	-.1395	-.1395	-.1339

X/L	.7290	.7470	.7870	.7950	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1197		
70.000							-.1125	-.1161	-.1054
80.000							-.0752	-.0716	-.0627
90.000	.0049	-.0147	-.0271	-.0398	-.0487	-.0378	-.0253	-.0093	-.0182
100.000	.0209	.0014	-.0058	-.0200	-.0253	-.0307			
110.000	.0103	-.0058	-.0147	-.0182	-.0236	.2077			
120.000						.2414			
130.000						.0939			
140.000						-.1161			
150.000						-.0770			
160.000						-.0698			
170.000						-.0894			
180.000	-.1303	-.1232	-.1108	-.0930	-.0878	.0565			

OA64 ORBITER ENTRY CONFIGURATION (R04007)

MACH (2) = 2.950 ALPHA (7) = 20.030 RN/L = 2.5135 BETA = -6.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2818	.1277	.2208												
70.000	.1816	.2175	.2012												
80.000	.1209	.1636	.1816												
90.000			.1359	.1156	.0531	.0253	.0253	.0270	.0287	.0305	.0305	.0322	.0293	.0293	.0274
100.000						.0131	.0148	.0166	.0183	.0183	.0218	.0235	.0216	.0216	.0216
110.000						-.0251	-.0077	-.0025	.0027	.0027	.0027	.0022	.0042	.0061	.0061
120.000						-.0303								-.1545	
130.000						-.0547								-.1506	
140.000						-.1120								-.1487	
150.000						-.1311								-.1371	
160.000						-.1311								-.1351	
170.000						-.1277								-.1313	
180.000						-.1242	-.1224	-.1224	-.1242	-.1294	-.1311	-.1351	-.1371	-.1351	-.1313

X/L	.4900	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0274	.0274	.0293	.0293	.0313	.0293	.0305	.0287	.0287	.0287	.0287	.0270	.0287	.0252	.0068
100.000	.0216	.0216	.0216	.0216	.0216	.0216	.0234	.0287	.0270	.0234	.0234	.0270	.0287	.0270	.0299
110.000	.0061	.0061	.0061	.0061	.0255	.0061	.0075	.0040	.0040	.0040	.0057	.0075	.0093	.0093	.0139
120.000						-.1487								-.1341	
130.000						-.1447								-.1341	
140.000						-.1447								-.1341	
150.000						-.1465								-.1341	
160.000						-.1465								-.1341	
170.000						-.1447								-.1341	
180.000	-.1313	-.1274	-.1255	-.1255	-.1274	-.1305	-.1323	-.1376	-.1447	-.1465	-.1465	-.1412	-.1412	-.1394	-.1321

X/L	.7290	.7470	.7[illegible]	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.1196		
70.000							-.1250	-.1107	-.0894
80.000							-.0983	-.0947	-.0858
90.000	-.0093	-.0308	-.0449	-.0555	-.0644	-.0591	-.0538	-.0199	-.0502
100.000	.0210	.0032	-.0075	-.0199	-.0271	-.0520			
110.000	.0175	.0032	-.0075	-.0199	-.0217	.1870			
120.000						.2382			
130.000						.0958			
140.000						-.1179			
150.000						-.0787			
160.000						-.0716			
170.000						-.0894			
180.000	-.1250	-.1179	-.1054	-.0947	-.0858	.0406			

OA64 ORBITER ENTRY CONFIGURATION (RQ4007)

MACH (Z) = 2.950 ALPHA (8) = 20.970 RN/L = 2.5135 BETA = -6.0000

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2598	.1131	.2223												
70.000	.1750	.2158	.2011												
80.000	.1113	.1570	.1815												
90.000			.1309	.1150	.1189	.0194	.0195	.0231	.0231	.0250	.0268	.0268	.0273	.0273	.0252
100.000						.0085	.0083	.0103	.0140	.0158	.0176	.0213	.0192	.0172	.0172
110.000						-.0411	-.0191	-.0099	-.0044	-.0044	-.0026	-.0010	.0011	.0011	.0031
120.000						-.0685								-.1682	
130.000						-.0723								-.1642	
140.000						-.1293								-.1642	
150.000						-.1495								-.1541	
160.000						-.1476								-.1480	
170.000						-.1440								-.1420	
180.000						-.1384	-.1366	-.1384	-.1440	-.1476	-.1495	-.1501	-.1480	-.1480	-.1440

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0252	.0252	.0273	.0273	.0293	.0273	.0268	.0268	.0249	.0249	.0249	.0212	.0174	.0059	-.0125
100.000	.0172	.0192	.0172	.0212	.0212	.0212	.0212	.0268	.0249	.0249	.0230	.0230	.0249	.0249	.0217
110.000	.0011	.0031	.0031	.0031	.0273	.0031	.0043	.0024	.0006	.0024	.0024	.0024	.0062	.0062	.0084
120.000						-.1621								-.1492	
130.000						-.1623								-.1473	
140.000						-.1623								-.1473	
150.000						-.1623								-.1492	
160.000						-.1623								-.1473	
170.000						-.1642								-.1548	
180.000	-.1400	-.1359	-.1359	-.1330	-.1420	-.1511	-.1529	-.1604	-.1625	-.1623	-.1642	-.1623	-.1548	-.1548	-.1490

X/L	.7290	.7470	.7670	.7850	.8150	.8290	.8620	.9000	.9400
PHI									
60.000							-.1395		
70.000							-.1452	-.1300	-.1092
80.000							-.1262	-.1149	-.1073
90.000	-.0314	-.0542	-.0731	-.0826	-.0921	-.0845	-.0788	-.0466	-.0750
100.000	.0084	-.0143	-.0257	-.0409	-.0485	-.0826			
110.000	.0103	-.0125	-.0238	-.0278	-.0352	.1741			
120.000						.2385			
130.000						.0937			
140.000						-.1319			
150.000						-.0902			
160.000						-.0845			
170.000						-.1054			
180.000	-.1414	-.1357	-.1243	-.1092	-.1016	.0462			

OA84 ORBITER ENTRY CONFIGURATION (RQ4007)

MACH (3) = 4.000 ALPHA (1) = 8.010 RN/L = 3.4980 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI															
60.000	.2782	.2109	.1908												
70.000	.2635	.2303	.1943												
80.000	.2490	.2284	.1933												
90.000			.1998	.1431	.0670	.0403	.0345	.0333	.0314	.0294	.0284	.0274	.0252	.0241	.0220
100.000						.0412	.0383	.0353	.0304	.0274	.0254	.0254	.0220	.0220	.0188
110.000						.0561	.0452	.0363	.0294	.0225	.0195	.0167	.0146	.0135	.0104
120.000						.0660								-.0405	
130.000						.0304								-.0501	
140.000						-.0300								-.0575	
150.000						-.0438								-.0585	
160.000						-.0487								-.0575	
170.000						-.0507								-.0575	
180.000						-.0517	-.0517	-.0537	-.0537	-.0537	-.0547	-.0554	-.0554	-.0564	-.0554

X/L	.4500	.4880	.4880	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0210	.0199	.0199	.0199	.0210	.0210	.0238	.0229	.0199	.0189	.0179	.0179	.0209	.0209	.0217
100.000	.0187	.0157	.0148	.0148	.0135	.0135	.0159	.0159	.0159	.0179	.0149	.0139	.0139	.0109	.0127
110.000	.0072	.0081	.0051	.0040	.0146	.0019	.0020	.0020	.0020	.0030	.0030	.0030	.0020	.0020	-.0003
120.000						-.0607								-.0565	
130.000						-.0605								-.0565	
140.000						-.0635								-.0555	
150.000						-.0605								-.0555	
160.000						-.0585								-.0555	
170.000						-.0575								-.0555	
180.000	-.0554	-.0554	-.0554	-.0554	-.0543	-.0555	-.0555	-.0565	-.0555	-.0526	-.0555	-.0565	-.0536	-.0555	-.0543

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0143		
70.000							.0017	.0087	.0167
80.000							.0147	.0357	.0317
90.000	.0227	.0147	.0157	.0107	.0067	.0027	.0456	.0586	.0436
100.000	.0177	.0127	.0137	.0147	.0127	-.0023			
110.000	.0027	-.0013	.0007	.0037	.0097	.1866			
120.000						.2768			
130.000						.1924			
140.000						-.0103			
150.000						-.0405			
160.000						-.0353			
170.000						-.0513			
180.000	-.0533	-.0543	-.0543	-.0523	-.0493	-.0233			

OA64 ORBITER ENTRY CONFIGURATION (RQ4007)

MACH (3) = 4.000 ALPHA (2) = 10.010 RN/L = 3.4980 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2704	.2166	.1934												
70.000	.2482	.2249	.1906												
80.000	.2194	.2166	.1896												
90.000			.1886	.1360	.0635	.0367	.0308	.0288	.0278	.0258	.0246	.0248	.0220	.0220	.0199
100.000						.0358	.0318	.0298	.0268	.0248	.0229	.0219	.0199	.0178	.0187
110.000						.0447	.0367	.0308	.0248	.0199	.0159	.0146	.0114	.0104	.0061
120.000						.0506								-.0479	
130.000						.0169								-.0543	
140.000						-.0407								-.0638	
150.000						-.0536								-.0649	
160.000						-.0565								-.0628	
170.000						-.0585								-.0617	
180.000						-.0585	-.0595	-.0605	-.0605	-.0605	-.0615	-.0596	-.0607	-.0607	-.0607

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5810	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0199	.0199	.0210	.0210	.0220	.0220	.0223	.0213	.0203	.0173	.0173	.0173	.0193	.0203	.0207
100.000	.0157	.0146	.0146	.0157	.0157	.0167	.0173	.0173	.0173	.0173	.0143	.0123	.0123	.0103	.0127
110.000	.0051	.0040	.0040	.0061	.0157	.0029	.0043	.0053	.0053	.0073	.0033	.0023	.0023	-.0006	-.0013
120.000						-.0744								-.0664	
130.000						-.0714								-.0654	
140.000						-.0704								-.0654	
150.000						-.0664								-.0654	
160.000						-.0654								-.0654	
170.000						-.0644								-.0674	
180.000	-.0807	-.0807	-.0807	-.0817	-.0817	-.0624	-.0654	-.0654	-.0664	-.0674	-.0674	-.0674	-.0674	-.0694	-.0683

X/L	.7290	.7470	.7670	.7850	.9030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0233		
70.000							-.0013	.0017	.0037
80.000							.0117	.0287	.0257
90.000	.0217	.0147	.0127	.0077	.0037	.0017	.0398	.0556	.0396
100.000	.0187	.0137	.0137	.0127	.0107	.0067			
110.000	.0037	-.0003	.0017	.0037	.0057	.1951			
120.000						.2665			
130.000						.1616			
140.000						-.0323			
150.000						-.0453			
160.000						-.0433			
170.000						-.0473			
180.000	-.0873	-.0853	-.0843	-.0813	-.0363	-.0323			

OA84 ORBITER ENTRY CONFIGURATION (RQ4007)

MACH (3) = 4.000 ALPHA (3) = 12.010 RN/L = 3.4980 BETA = -5.9800

SECTION (1,FUSELAGE DEPENDENT VARIABLE CP

X/L	.0370	.1260	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2687	.2028	.1952												
70.000	.2353	.2212	.1898												
80.000	.1989	.2054	.1847												
90.000			.1769	.1319	.0634	.0379	.0321	.0301	.0281	.0272	.0262	.0262	.0214	.0214	.0214
100.000						.0350	.0311	.0291	.0272	.0242	.0232	.0223	.0182	.0171	.0161
110.000						.0379	.0330	.0291	.0242	.0184	.0154	.0107	.0097	.0086	.0065
120.000						.0389								-.0606	
130.000						.0115								-.0606	
140.000						-.0433								-.0680	
150.000						-.0560								-.0691	
160.000						-.0580								-.0680	
170.000						-.0590								-.0659	
180.000						-.0590	-.0599	-.0599	-.0599	-.0599	-.0609	-.0637	-.0637	-.0648	-.0637

X/L	.4500	.4660	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0214	.0214	.0224	.0224	.0224	.0224	.0238	.0229	.0199	.0179	.0179	.0179	.0199	.0238	.0257
100.000	.0161	.0161	.0171	.0203	.0182	.0182	.0189	.0189	.0179	.0179	.0139	.0129	.0139	.0129	.0167
110.000	.0054	.0054	.0054	.0054	.0182	.0065	.0090	.0070	.0070	.0060	.0050	.0040	.0030	.0010	.0017
120.000						-.0818								-.0724	
130.000						-.0764								-.0714	
140.000						-.0734								-.0714	
150.000						-.0714								-.0754	
160.000						-.0694								-.0754	
170.000						-.0694								-.0764	
180.000	-.0648	-.0659	-.0659	-.0659	-.0680	-.0694	-.0704	-.0724	-.0724	-.0724	-.0744	-.0744	-.0754	-.0754	-.0743

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0393		
70.000							-.0083	-.0063	-.0053
80.000							.0117	.0227	.0217
90.000	.0087	.0187	.0107	.0087	.0027	.0007	.0347	.0506	.0367
100.000	.0227	.0177	.0157	.0117	.0107	.0087			
110.000	.0087	.0027	.0047	.0087	.0057	.2016			
120.000						.2611			
130.000						.1426			
140.000						-.0473			
150.000						-.0543			
160.000						-.0503			
170.000						-.0523			
180.000	-.0733	-.0723	-.0723	-.0693	-.0633	-.0503			

OA64 ORBITER ENTRY CONFIGURATION (RQ4007)

MACH (3) = 4.000 ALPHA (4) = 14.010 RN/L = 3.4980 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2812	.1826	.1989												
70.000	.2184	.2175	.1896												
80.000	.1766	.1934	.1806												
90.000			.1637	.1256	.0601	.0342	.0282	.0262	.0252	.0233	.0223	.0223	.0224	.0224	.0224
100.000						.0282	.0243	.0233	.0213	.0203	.0193	.0183	.0171	.0161	.0171
110.000						.0252	.0243	.0203	.0163	.0123	.0103	.0097	.0086	.0075	.0065
120.000						.0243								-.0723	
130.000						.0003								-.0680	
140.000						-.0524								-.0723	
150.000						-.0654								-.0723	
160.000						-.0664								-.0701	
170.000						-.0684								-.0701	
180.000						-.0664	-.0674	-.0674	-.0684	-.0684	-.0694	-.0680	-.0669	-.0691	-.0701

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.3980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0224	.0224	.0224	.0224	.0224	.0224	.0223	.0223	.0183	.0183	.0173	.0183	.0203	.0223	.0249
100.000	.0171	.0182	.0193	.0193	.0193	.0193	.0183	.0183	.0163	.0183	.0143	.0143	.0153	.0143	.0158
110.000	.0085	.0085	.0086	.0097	.0193	.0075	.0083	.0073	.0073	.0053	.0053	.0033	.0043	.0033	.0016
120.000						-.0829								-.0793	
130.000						-.0813								-.0773	
140.000						-.0793								-.0773	
150.000						-.0803								-.0823	
160.000						-.0773								-.0823	
170.000						-.0753								-.0823	
180.000	-.0712	-.0701	-.0712	-.0701	-.0723	-.0763	-.0773	-.0763	-.0783	-.0803	-.0813	-.0823	-.0833	-.0823	-.0822

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0559		
70.000							-.0337	-.0317	-.0317
80.000							.0047	.0057	.0047
90.000	.0249	.0143	.0087	.0037	.0006	.0057	.0239	.0309	.0360
100.000	.0218	.0178	.0148	.0117	.0077	.0107			
110.000	.0077	.0037	.0047	.0067	.0067	.2308			
120.000						.2548			
130.000						.1269			
140.000						-.0610			
150.000						-.0660			
160.000						-.0590			
170.000						-.0600			
180.000	-.0822	-.0822	-.0812	-.0782	-.0681	-.0610			

OA64 (ORBITER ENTRY CONFIGURATION) (RQ4007)

MACH (5) = 4.000 ALPHA (5) = 16.040 RN/L = 3.4980 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2556	.1624	.1999												
70.000	.2036	.2119	.1678												
60.000	.1563	.1795	.1755												
90.000			.1513	.1191	.0567	.0315	.0265	.0245	.0235	.0225	.0225	.0225	.0227	.0227	.0218
100.000						.0245	.0214	.0194	.0194	.0174	.0174	.0174	.0173	.0151	.0173
110.000						.0124	.0144	.0134	.0114	.0094	.0074	.0076	.0065	.0054	.0054
120.000						.0084								-.0839	
130.000						-.0148								-.0796	
140.000						-.0611								-.0798	
150.000						-.0732								-.0785	
160.000						-.0742								-.0764	
170.000						-.0742								-.0764	
180.000						-.0742	-.0742	-.0742	-.0742	-.0752	-.0752	-.0742	-.0764	-.0764	-.0774

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0227	.0216	.0216	.0205	.0216	.0227	.0235	.0223	.0213	.0213	.0213	.0213	.0243	.0262	.0257
100.000	.0184	.0184	.0184	.0205	.0184	.0184	.0203	.0183	.0173	.0213	.0173	.0173	.0193	.0183	.0186
110.000	.0065	.0076	.0087	.0087	.0184	.0087	.0093	.0093	.0093	.0103	.0073	.0073	.0063	.0073	.0054
120.000						-.0882								-.0823	
130.000						-.0823								-.0793	
140.000						-.0813								-.0793	
150.000						-.0833								-.0783	
160.000						-.0843								-.0843	
170.000						-.0803								-.0843	
180.000	-.0774	-.0774	-.0774	-.0784	-.0796	-.0813	-.0813	-.0823	-.0853	-.0863	-.0863	-.0843	-.0833	-.0833	-.0852

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0689		
70.000							-.0526	-.0567	-.0537
60.000							-.0170	-.0201	-.0119
90.000	.0257	.0125	.0084	.0005	-.0048	.0033	.0145	.0216	.0328
100.000	.0237	.0178	.0155	.0104	.0084	.0104			
110.000	.0104	.0043	.0084	.0074	.0155	.2620			
120.000						.2611			
130.000						.1193			
140.000						-.0700			
150.000						-.0689			
160.000						-.0588			
170.000						-.0649			
180.000	-.0852	-.0852	-.0781	-.0710	-.0689	-.0394			

OA64 ORBITER ENTRY CONFIGURATION (R04D07)

MACH (3) = 4.000 ALPHA (6) = 18.000 RN/L = 3.4980 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2508	.1553	.2034												
70.000	.1893	.2071	.1883												
80.000	.1342	.1854	.1727												
90.000			.1384	.1124	.0521	.0313	.0220	.0209	.0199	.0188	.0188	.0199	.0213	.0213	.0201
100.000						.0168	.0147	.0136	.0136	.0126	.0126	.0126	.0146	.0135	.0148
110.000						-.0051	.0022	.0032	.0032	.0012	.0001	.0023	.0014	.0025	.0036
120.000						-.0113								-.0959	
130.000						-.0352								-.0948	
140.000						-.0727								-.0915	
150.000						-.0862								-.0993	
160.000						-.0872								-.0671	
170.000						-.0872								-.0871	
180.000						-.0851	-.0851	-.0851	-.0862	-.0872	-.0882	-.0860	-.0882	-.0882	-.0892

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0190	.0190	.0190	.0190	.0201	.0201	.0178	.0178	.0178	.0178	.0178	.0188	.0199	.0209	.0211
100.000	.0146	.0146	.0146	.0179	.0146	.0146	.0136	.0136	.0126	.0168	.0136	.0136	.0147	.0147	.0160
110.000	.0047	.0047	.0047	.0058	.0157	.0047	.0043	.0043	.0032	.0022	.0022	.0022	.0043	.0022	.0043
120.000						-.0959								-.0997	
130.000						-.0955								-.0986	
140.000						-.0966								-.0945	
150.000						-.0976								-.0934	
160.000						-.0986								-.0966	
170.000						-.0986								-.0966	
180.000	-.0871	-.0882	-.0871	-.0893	-.0904	-.0955	-.0976	-.0976	-.1007	-.0997	-.0997	-.0976	-.0966	-.0966	-.0935

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0798		
70.000							-.0756	-.0767	-.0746
80.000							-.0493	-.0535	-.0409
90.000	.0169	.0022	-.0082	-.0148	-.0220	-.0178	-.0104	.0169	.0127
100.000	.0232	.0148	.0106	.0043	.0001	-.0157			
110.000	.0085	.0053	.0043	.0032	.0095	.2635			
120.000						.2617			
130.000						.1168			
140.000						-.0819			
150.000						-.0777			
160.000						-.0725			
170.000						-.0851			
180.000	-.0914	-.0861	-.0840	-.0798	-.0767	-.0346			

OA64 ORBITER ENTRY CONFIGURATION (RQ4007)

MACH (3) = 4.000 ALPHA (7) = 20.010 RN/L = 3.4980 BETA = -5.9800

SECTION (9)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2480	.1229	.2062												
70.000	.1755	.2043	.1894												
80.000	.1180	.1547	.1715												
90.000			.1299	.1130	.0585	.0357	.0307	.0307	.0307	.0307	.0297	.0317	.0309	.0309	.0287
100.000						.0248	.0228	.0238	.0238	.0228	.0228	.0248	.0245	.0224	.0245
110.000						-.0020	.0069	.0109	.0119	.0109	.0109	.0117	.0117	.0139	.0139
120.000						-.0149								-.0850	
130.000						-.0319								-.0850	
140.000						-.0655								-.0850	
150.000						-.0774								-.0818	
160.000						-.0774								-.0797	
170.000						-.0774								-.0787	
180.000						-.0744	-.0744	-.0744	-.0764	-.0774	-.0794	-.0797	-.0787	-.0787	-.0787

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0287	.0277	.0287	.0287	.0309	.0319	.0323	.0323	.0313	.0323	.0313	.0313	.0313	.0305	.0220
100.000	.0245	.0245	.0245	.0245	.0256	.0256	.0273	.0273	.0263	.0283	.0283	.0283	.0293	.0283	.0310
110.000	.0149	.0149	.0160	.0170	.0277	.0149	.0184	.0174	.0174	.0174	.0165	.0174	.0184	.0174	.0180
120.000						-.0850								-.0834	
130.000						-.0824								-.0784	
140.000						-.0824								-.0784	
150.000						-.0834								-.0794	
160.000						-.0824								-.0794	
170.000						-.0843								-.0804	
180.000	-.0787	-.0787	-.0797	-.0787	-.0818	-.0843	-.0853	-.0863	-.0853	-.0814	-.0834	-.0824	-.0814	-.0804	-.0753

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
90.000							-.0552		
70.000							-.0702	-.0672	-.0602
80.000							-.0512	-.0572	-.0402
90.000	.0120	-.0051	-.0141	-.0211	-.0301	-.0281	-.0211	.0019	-.0061
100.000	.0320	.0200	.0150	.0069	.0009	-.0201			
110.000	.0230	.0190	.0160	.0140	.0099	.2325			
120.000						.2645			
130.000						.1232			
140.000						-.0722			
150.000						-.0662			
160.000						-.0612			
170.000						-.0712			
180.000	-.0753	-.0743	-.0722	-.0692	-.0662	-.0041			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063) (R84007)

OA84 ORBITER ENTRY CONFIGURATION

MACH (8) = 4.000 ALPHA (8) = 20.990 RN/L = 3.4980 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2050	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2468	.1103	.2089												
70.000	.1711	.2032	.1913												
80.000	.1103	.1498	.1721												
90.000			.1235	.1103	.0566	.0333	.0293	.0293	.0293	.0293	.0303	.0313	.0306	.0306	.0284
100.000						.0222	.0212	.0212	.0222	.0222	.0222	.0242	.0252	.0230	.0241
110.000						-.0062	.0029	.0080	.0100	.0090	.0090	.0111	.0122	.0133	.0133
120.000						-.0244								-.0904	
130.000						-.0406								-.0904	
140.000						-.0731								-.0904	
150.000						-.0842								-.0904	
160.000						-.0842								-.0850	
170.000						-.0832								-.0839	
180.000						-.0802	-.0802	-.0822	-.0832	-.0852	-.0862	-.0850	-.0850	-.0850	-.0839

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0284	.0284	.0295	.0306	.0306	.0327	.0314	.0324	.0314	.0304	.0294	.0274	.0254	.0214	.0104
100.000	.0241	.0241	.0241	.0252	.0252	.0252	.0264	.0264	.0264	.0314	.0274	.0274	.0294	.0284	.0287
110.000	.0133	.0144	.0155	.0165	.0516	.0155	.0163	.0153	.0163	.0163	.0163	.0163	.0173	.0173	.0185
120.000						-.0893								-.0853	
130.000						-.0873								-.0843	
140.000						-.0873								-.0843	
150.000						-.0883								-.0853	
160.000						-.0893								-.0843	
170.000						-.0893								-.0843	
180.000	-.0839	-.0860	-.0860	-.0860	-.0828	-.0913	-.0913	-.0913	-.0903	-.0863	-.0883	-.0883	-.0863	-.0832	-.0791

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0710		
70.000							-.0761	-.0689	-.0639
80.000							-.0628	-.0649	-.0537
90.000	.0002	-.0181	-.0242	-.0354	-.0425	-.0395	-.0344	-.0334	-.0212
100.000	.0287	.0134	.0073	-.0008	-.0089	-.0334			
110.000	.0258	.0175	.0124	.0094	.0053	.2014			
120.000						.2637			
130.000						.1253			
140.000						-.0750			
150.000						-.0710			
160.000						-.0659			
170.000						-.0730			
180.000	-.0791	-.0771	-.0750	-.0710	-.0689	-.0049			

OA64 ORBITER ENTRY CONFIGURATION (RQ4007)

MACH (4) = 4.500 ALPHA (1) = 8.000 RN/L = 5.4965 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4130	.4310
PHI															
80.000	.2726	.2248	.1814												
70.000	.2596	.2205	.1808												
80.000	.2353	.2181	.1808												
90.000			.1861	.1328	.0628	.0391	.0314	.0290	.0273	.0261	.0243	.0237	.0202	.0190	.0171
100.000						.0391	.0332	.0308	.0267	.0243	.0225	.0213	.0177	.0165	.0141
110.000						.0400	.0385	.0320	.0255	.0196	.0166	.0141	.0110	.0098	.0062
120.000						.0433								-.0352	
130.000						.0261								-.0431	
140.000						-.0255								-.0505	
150.000						-.0362								-.0511	
160.000						-.0362								-.0498	
170.000						-.0427								-.0492	
180.000						-.0439	-.0445	-.0462	-.0468	-.0474	-.0480	-.0480	-.0492	-.0492	-.0492

X/L	.4500	.4690	.4880	.5030	.5240	.5460	.5610	.5850	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0133	.0147	.0147	.0141	.0147	.0153	.0132	.0173	.0164	.0146	.0146	.0128	.0128	.0128	.0008
100.000	.0116	.0110	.0104	.0092	.0092	.0092	.0110	.0110	.0110	.0128	.0110	.0110	.0092	.0092	-.0025
110.000	.0043	.0025	.0019	.0013	.0092	-.0011	.0001	.0001	.0001	.0001	.0010	.0010	.0019	.0001	-.0099
120.000						-.0005								-.0479	
130.000						-.0524								-.0479	
140.000						-.0524								-.0488	
150.000						-.0515								-.0470	
160.000						-.0506								-.0479	
170.000						-.0488								-.0470	
180.000	-.0492	-.0492	-.0492	-.0492	-.0492	-.0488	-.0479	-.0488	-.0479	-.0479	-.0470	-.0470	-.0461	-.0479	-.0344

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0234		
70.000							-.0018	.0049	.0109
80.000							.0103	.0204	.0251
90.000	.0098	.0042	.0029	.0049	.0035	.0049	.0305	.0480	.0433
100.000	.0042	.0015	.0022	.0029	.0076	.0312			
110.000	-.0072	-.0099	-.0086	-.0059	.0177	.1638			
120.000						.2440			
130.000						.1699			
140.000						-.0119			
150.000						-.0429			
160.000						-.0450			
170.000						-.0524			
180.000	-.0530	-.0530	-.0530	-.0490	-.0490	-.0362			

OA64 ORBITER ENTRY CONFIGURATION (RQ40D7)

MACH (4) = 4.500 ALPHA (2) = 10.010 R[illegible] = 3.4965 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4030	.4310
PHI															
60.000	.2644	.2225	.1818												
70.000	.2402	.2142	.1777												
80.000	.2089	.2042	.1753												
90.000			.1736	.1264	.0609	.0385	.0303	.0279	.0262	.0244	.[illegible]32	.0220	.0188	.0182	.0158
100.000						.0385	.0303	.0279	.0256	.0226	.0208	.0191	.0158	.0151	.0127
110.000						.0403	.0338	.0279	.0232	.0179	.0149	.0115	.0085	.0066	.0048
120.000						.0427								-.0438	
130.000						.0203								-.0462	
140.000						-.0310								-.0541	
150.000						-.0428								-.0547	
160.000						-.0434								-.0535	
170.000						-.0476								-.0523	
180.000						-.0476	-.0481	-.0493	-.[illegible]499	.0499	-.0505	-.0511	-.0511	-.0517	-.0511

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5990	.[illegible]70	.6360	.6540	.6730	.6880	.7[illegible]
PHI															
90.000	.0158	.0151	.0158	.0158	.0178	.0176	.0178	.0169	.0160	[illegible]	.0142	.0142	.0142	.0142	.0100
100.000	.0121	.0115	.0115	.0115	.0115	.0121	.0142	.0142	.0123		.0105	.0103	.0096	.0087	.0061
110.000	.0038	.0024	.0018	.0018	.0115	.0012	.0015	.0033	.0042	[illegible]	.0024	.0015	.0024	.0006	-.0[illegible]
120.000						.0024								-.0561	
130.000						-.0606								-.0552	
140.000						-.0552								-.0543	
150.000						-.0552								-.0543	
160.000						-.0543								-.0543	
170.000						-.0534								-.0552	
180.000	-.0517	-.0517	-.0529	-.0529	-.0523	-.0525	-.0534	-.0543	-.0552	-.0561	[illegible]	-.0561	-.0570	-.0579	-.0542

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.[illegible]00
PHI									
60.000							-.0247		
70.000							.0022	.0087	.0074
80.000							.0172	.0271	.0284
90.000	.0179	.0120	.0113	.0107	.0087	.0100	.0349	.0500	.0474
100.000	.0133	.0113	.0113	.0120	.0140	.0317			
110.000	.0022	-.0011	.0009	.0041	.0172	.1876			
120.000						.2420			
130.000						.1463			
140.000						-.0273			
150.000						-.0411			
160.000						-.0404			
170.000						-.0411			
180.000	-.0922	-.0515	-.0509	-.0489	-.0450	-.0358			

OA64 ORBITER ENTRY CONFIGURATION (RQ4007)

MACH (4) = 4.900 ALPHA (3) = 12.000 RN/L = 3.4965 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2581	.2201	.1824												
70.000	.2213	.2077	.1759												
80.000	.1848	.1901	.1706												
90.000			.1612	.1211	.0586	.0344	.0279	.0256	.0238	.0226	.0214	.0203	.0176	.0170	.0151
100.000						.0344	.0267	.0244	.0220	.0197	.0179	.0173	.0145	.0135	.0115
110.000						.0320	.0273	.0226	.0185	.0138	.0108	.0085	.0060	.0054	.0036
120.000						.0303								-.0547	
130.000						.0102								-.0529	
140.000						-.0387								-.0578	
150.000						-.0487								-.0590	
160.000						-.0505								-.0578	
170.000						-.0523								-.0566	
180.000						-.0517	-.0529	-.0534	-.0534	-.0540	-.0540	-.0547	-.0547	-.0554	-.0560

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0158	.0164	.0178	.0170	.0176	.0164	.0169	.0160	.0151	.0142	.0124	.0133	.0151	.0169	.0118
100.000	.0115	.0115	.0121	.0127	.0127	.0133	.0133	.0133	.0124	.0115	.0097	.0097	.0106	.0097	.0046
110.000	.0050	.0024	.0024	.0024	.0133	.0030	.0052	.0052	.0043	.0034	.0034	.0025	.0016	.0025	-.0053
120.000						.0030								-.0633	
130.000						-.0633								-.0597	
140.000						-.0597								-.0615	
150.000						-.0615								-.0624	
160.000						-.0606								-.0615	
170.000						-.0579								-.0624	
180.000	-.0568	-.0572	-.0572	-.0572	-.0578	-.0588	-.0597	-.0606	-.0615	-.0615	-.0624	-.0624	-.0633	-.0633	-.0653

X/L	.7290	.7470	.7670	.7950	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0402		
70.000							-.0132	-.0112	-.0119
80.000							.0132	.0198	.0178
90.000	.0191	.0123	.0085	.0072	.0039	.0079	.0277	.0428	.0389
100.000	.0085	.0112	.0099	.0112	.0112	.0277			
110.000	.0026	.0006	.0020	.0046	.0132	.2063			
120.000						.2478			
130.000						.1292			
140.000						-.0435			
150.000						-.0528			
160.000						-.0495			
170.000						-.0488			
180.000	-.0813	-.0820	-.0820	-.0800	-.0567	-.0501			

DATE 24 JAN 74 TABULATED SOURCE PRESSURE DATA FOR IA35/OA84 (LARC UPWT 1063) (R04007)

OA84 ORBITER ENTRY CONFIGURATION

MACH (4) = 4.500 ALPHA (4) = 14.010 RN/L = 3.4965 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1280	.1840	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2975	.2204	.1955												
70.000	.2058	.2026	.1760												
80.000	.1838	.1784	.1668												
90.000			.1512	.1163	.0568	.0365	.0276	.0252	.0241	.0223	.0211	.0205	.0189	.0183	.0183
100.000						.0282	.0241	.0223	.0211	.0187	.0176	.0164	.0146	.0140	.0128
110.000						.0235	.0217	.0181	.0152	.0122	.0099	.0085	.0067	.0081	.0037
120.000						.0193								-.0620	
130.000						-.0020								-.0596	
140.000						-.0410								-.0608	
150.000						-.0528								-.0608	
160.000						-.0540								-.0596	
170.000						-.0534								-.0590	
180.000						-.0552	-.0558	-.0552	-.0558	-.0558	-.0564	-.0566	-.0578	-.0578	-.0598

X/L	.4500	.4680	.4880	.5090	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0183	.0183	.0189	.0177	.0177	.0177	.0179	.0179	.0161	.0161	.0161	.0161	.0179	.0206	.0147
100.000	.0128	.0140	.0148	.0148	.0152	.0152	.0152	.0143	.0143	.0143	.0134	.0134	.0143	.0143	.0101
110.000	.0037	.0037	.0055	.0061	.0152	.0061	.0080	.0080	.0071	.0062	.0044	.0053	.0062	.0053	-.0018
120.000						.0073								-.0642	
130.000						-.0651								-.0615	
140.000						-.0606								-.0615	
150.000						-.0651								-.0624	
160.000						-.0651								-.0633	
170.000						-.0624								-.0633	
180.000	-.0598	-.0602	-.0602	-.0608	-.0608	-.0624	-.0633	-.0642	-.0642	-.0660	-.0660	-.0651	-.0633	-.0642	-.0668

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0474		
70.000							-.0322	-.0322	-.0289
80.000							.0055	.0081	.0022
90.000	.0214	.0141	.0101	.0081	.0042	.0194	.0240	.0273	.0372
100.000	.0147	.0068	.0147	.0121	.0121	.0346			
110.000	.0081	.0028	.0002	.0061	.0280	.2197			
120.000						.2521			
130.000						.1212			
140.000						-.0507			
150.000						-.0547			
160.000						-.0514			
170.000						-.0520			
180.000	-.0648	-.0648	-.0653	-.0620	-.0580	-.0501			

OA84 ORBITER ENTRY CONFIGURATION (RQ4107)

MACH (4) = 4.300 ALPHA (5) = 16.000 RN/L = 3.4965 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2455	.2213	.1877												
70.000	.1907	.1977	.1753												
80.000	.1447	.1685	.1841												
90.000			.1405	.1116	.0556	.0332	.0279	.0281	.0244	.0232	.0220	.0220	.0215	.0209	.0203
100.000						.0320	.0226	.0214	.0203	.0185	.0173	.0167	.0154	.0154	.0154
110.000						.0138	.0149	.0144	.0126	.0102	.0091	.0082	.0064	.0064	.0058
120.000						.0085								-.0663	
130.000						-.0128								-.0651	
140.000						-.0440								-.0663	
150.000						-.0564								-.0627	
160.000						-.0570								-.0615	
170.000						-.0564								-.0809	
180.000						-.0564	-.0576	-.0576	-.0582	-.0582	-.0593	-.0590	-.0609	-.0615	-.0615

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0209	.0205	.0205	.0191	.0197	.0197	.0205	.0214	.0196	.0196	.0196	.0205	.0223	.0241	.0142
100.000	.0181	.0181	.0181	.0173	.0167	.0161	.0178	.0169	.0169	.0160	.0169	.0160	.0178	.0178	.0108
110.000	.0070	.0070	.0088	.0094	.0167	.0094	.0097	.0097	.0088	.0097	.0079	.0088	.0088	.0070	-.0005
120.000						.0088								-.0678	
130.000						-.0669								-.0642	
140.000						-.0633								-.0633	
150.000						-.0678								-.0606	
160.000						-.0678								-.0660	
170.000						-.0678								-.0660	
180.000	-.0821	-.0821	-.0827	-.0833	-.0833	-.0860	-.0869	-.0887	-.0896	-.0896	-.0869	-.0880	-.0880	-.0860	-.0885

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0532		
70.000							-.0492	-.0485	-.0472
80.000							-.0212	-.0232	-.0232
90.000	.0208	.0108	.0082	.0022	-.0005	.0095	.0128	.0162	.0315
100.000	.0188	.0142	.0135	.0108	.0095	.0315			
110.000	.0075	.0028	.0048	.0075	.0282	.2303			
120.000						.2596			
130.000						.1169			
140.000						-.0579			
150.000						-.0592			
160.000						-.0565			
170.000						-.0652			
180.000	-.0865	-.0879	-.0879	-.0852	-.0825	-.0185			

OA64 ORBITER ENTRY CONFIGURATION (RQ4007)

MACH (4) = 4.500 ALPHA (6) = 18.000 RN/L = 3.4965 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3360	.3570	.3750	.3940	.4050	.4310
PHI															
80.000	.2422	.2227	.1914												
70.000	.1784	.1944	.1780												
80.000	.1281	.1559	.1630												
90.000			.1311	.1080	.0560	.0371	.0294	.0273	.0270	.0252	.0247	.0252	.0247	.0241	.0235
100.000						.0258	.0223	.0223	.0211	.0199	.0193	.0193	.0186	.0186	.0186
110.000						.0063	.0116	.0122	.0128	.0099	.0099	.0082	.0076	.0082	.0088
120.000						-.0025								-.0693	
130.000						-.0215								-.0693	
140.000						-.0493								-.0681	
150.000						-.0605								-.0663	
160.000						-.0611								-.0644	
170.000						-.0605								-.0638	
180.000						-.0593	-.0593	-.0593	-.0605	-.0611	-.0625	-.0632	-.0638	-.0644	-.0638

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0241	.0235	.0229	.0229	.0235	.0247	.0254	.0245	.0236	.0236	.0245	.0245	.0272	.0281	.0139
100.000	.0192	.0192	.0192	.0192	.0192	.0192	.0209	.0209	.0191	.0200	.0191	.0200	.0209	.0209	.0172
110.000	.0101	.0101	.0113	.0125	.0192	.0119	.0127	.0118	.0127	.0118	.0118	.0118	.0118	.0109	.0060
120.000						.0125								-.0696	
130.000						-.0678								-.0678	
140.000						-.0669								-.0676	
150.000						-.0687								-.0642	
160.000						-.0687								-.0687	
170.000						-.0705								-.0687	
180.000	-.0644	-.0651	-.0663	-.0663	-.0669	-.0696	-.0705	-.0715	-.0715	-.0696	-.0696	-.0687	-.0687	-.0687	-.0679

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0521		
70.000							-.0521	-.0521	-.0481
80.000							-.0349	-.0389	-.0369
90.000	.0205	.0086	.0020	-.0048	-.0105	-.0046	-.0026	.0146	.0218
100.000	.0258	.0192	.0179	.0139	.0106	.0291			
110.000	.0148	.0106	.0119	.0126	.0291	.2534			
120.000						.2607			
130.000						.1175			
140.000						-.0567			
150.000						-.0587			
160.000						-.0554			
170.000						-.0639			
180.000	-.0648	-.0639	-.0626	-.0587	-.0580	-.0395			

OA64 ORBITER ENTRY CONFIGURATION (R84007)

MACH (4) = 4.500 ALPHA (7) = 20.000 RN/L = 3.4985 BETA = -5.9600

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4090	.4310
PHI															
80.000	.2378	.2222	.1927												
70.000	.1650	.1915	.1768												
80.000	.1101	.1431	.1579												
90.000			.1195	.1048	.0552	.0357	.0304	.0298	.0286	.0280	.0280	.0292	.0277	.0271	.0265
100.000						.0245	.0227	.0221	.0221	.0215	.0215	.0221	.0216	.0210	.0216
110.000						-.0015	.0080	.0109	.0121	.0109	.0103	.0101	.0101	.0107	.0119
120.000						-.0139								-.0699	
130.000						-.0280								-.0712	
140.000						-.0552								-.0699	
150.000						-.0629								-.0748	
160.000						-.0646								-.0669	
170.000						-.0629								-.0778	
180.000						-.0611	-.0599	-.0617	-.0635	-.0641	-.0658	-.0657	-.0663	-.0663	-.0663

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0265	.0252	.0265	.0265	.0271	.0277	.0289	.0298	.0289	.0298	.0280	.0280	.0270	.0252	.0049
100.000	.0216	.0222	.0216	.0216	.0216	.0222	.0243	.0234	.0234	.0243	.0243	.0243	.0270	.0270	.0205
110.000	.0125	.0125	.0143	.0143	.0216	.0125	.0153	.0153	.0153	.0153	.0144	.0153	.0162	.0153	.0096
120.000						.0125								-.0687	
130.000						-.0667								-.0678	
140.000						-.0669								-.0678	
150.000						-.0678								-.0687	
160.000						-.0696								-.0660	
170.000						-.0705								-.0669	
180.000	-.0689	-.0675	-.0681	-.0681	-.0637	-.0715	-.0715	-.0715	-.0705	-.0705	-.0687	-.0678	-.0678	-.0678	-.0692

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
80.000							-.0572		
70.000							-.0625	-.0572	-.0518
80.000							-.0505	-.0543	-.0438
90.000	.0056	-.0078	-.0171	-.0245	-.0303	-.0258	-.0258	-.0078	-.0124
100.000	.0258	.0143	.0098	.0029	-.0018	.0116			
110.000	.0183	.0083	.0129	.0116	.0176	.2387			
120.000						.2710			
130.000						.1218			
140.000						-.0592			
150.000						-.0619			
160.000						-.0579			
170.000						-.0685			
180.000	-.0872	-.0839	-.0832	-.0832	-.0805	-.0365			

OA84 ORBITER ENTRY CONFIGURATION (RQ4007)

MACH (4) = 4.500 ALPHA (8) = 20.990 RN/L = 3.4965 BETA = -5.9800

SECTION (1)FUSELAGE DEPENDENT VARIABLE CP

X/L	.0870	.1260	.1640	.2030	.2420	.2640	.2820	.3010	.3190	.3380	.3570	.3750	.3940	.4050	.4310
PHI															
60.000	.2336	.2228	.1931												
70.000	.1589	.1902	.1772												
80.000	.1029	.1388	.1589												
90.000			.1147	.1035	.0557	.0350	.0315	.0315	.0309	.0309	.0303	.0309	.0301	.0295	.0289
100.000						.0250	.0238	.0232	.0238	.0232	.0232	.0244	.0240	.0240	.0246
110.000						-.0027	.0079	.0114	.0132	.0126	.0120	.0124	.0131	.0131	.0149
120.000						-.0192								-.0699	
130.000						-.0316								-.0705	
140.000						-.0564								-.0705	
150.000						-.0646								-.0699	
160.000						-.0652								-.0681	
170.000						-.0641								-.0663	
180.000						-.0623	-.0623	-.0635	-.0641	-.0658	-.0664	-.0663	-.0665	-.0675	-.0675

X/L	.4500	.4680	.4860	.5050	.5240	.5460	.5610	.5800	.5980	.6170	.6360	.6540	.6730	.6880	.7100
PHI															
90.000	.0283	.0283	.0295	.0295	.0314	.0314	.0332	.0341	.0323	.0314	.0305	.0296	.0269	.0215	-.0018
100.000	.0240	.0248	.0240	.0248	.0253	.0253	.0278	.0287	.0287	.0287	.0287	.0287	.0305	.0305	.0182
110.000	.0155	.0161	.0161	.0173	.0253	.0161	.0188	.0179	.0179	.0188	.0188	.0197	.0206	.0206	.0135
120.000						.0161								-.0678	
130.000						-.0660								-.0660	
140.000						-.0660								-.0660	
150.000						-.0651								-.0669	
160.000						-.0687								-.0651	
170.000						-.0696								-.0651	
180.000	-.0681	-.0687	-.0687	-.0687	-.0693	-.0705	-.0705	-.0696	-.0687	-.0678	-.0669	-.0669	-.0651	-.0642	-.0692

X/L	.7290	.7470	.7670	.7850	.8030	.8290	.8620	.9000	.9400
PHI									
60.000							-.0585		
70.000							-.0639	-.0585	-.0532
80.000							-.0585	-.0605	-.0499
90.000	-.0032	-.0172	-.0265	-.0332	-.0385	-.0359	-.0365	-.0285	-.0252
100.000	.0209	.0089	.0035	-.0025	-.0072	.0042			
110.000	.0189	.0129	.0095	.0082	.0142	.2110			
120.000						.2663			
130.000						.1243			
140.000						-.0399			
150.000						-.0619			
160.000						-.0592			
170.000						-.0685			
180.000	-.0872	-.0879	-.0859	-.0845	-.0832	-.0292			